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SOUTHERN PLANTER

DEVOTED TO

AGRICULTURE, HORTICULTURE, LIVE STOCK AND THE HOUSEHOLD.

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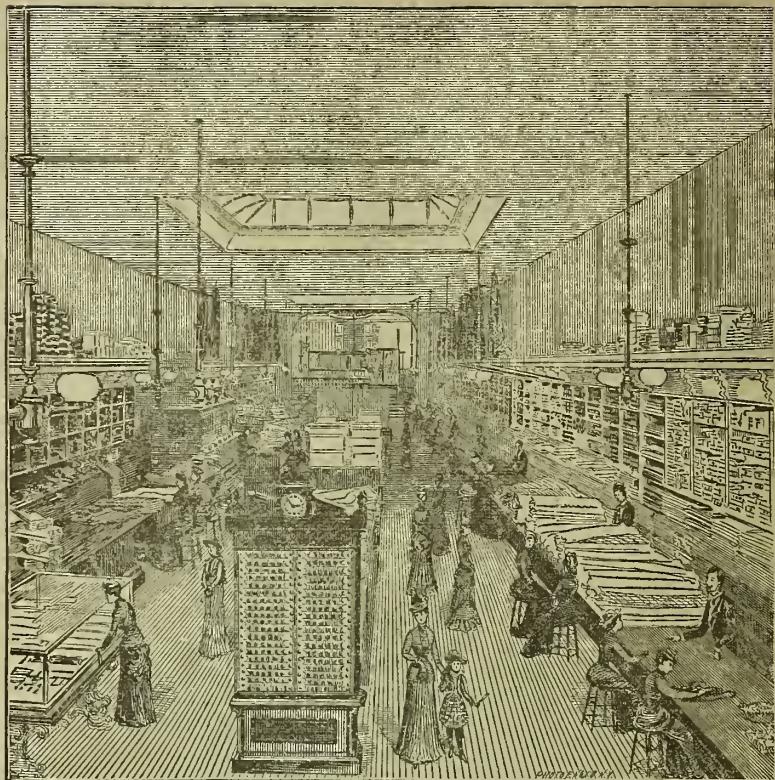
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—THE—

SOUTHERN PLANTER.

DEVOTED TO

Agriculture, Horticulture, Live Stock and the Household.

Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and pasturage are the two breasts of the State.—SULLY.

T. W. ORMOND, - - - - - PROPRIETOR.
W. C. KNIGHT, - - - - - EDITOR.

45TH YEAR. RICHMOND, DECEMBER, 1884. No. 12.

SELF-SUPPORTING EMPLOYMENT FOR SOUTHERN WOMEN.

A Prize Essay.

BY HENRY STEWART, OF PATTERSON, NEW JERSEY.

[This Essay is the result of a premium offered by J. M. Blair, Esq., of Richmond, Virginia, and is awarded by a committee appointed by the Virginia State Agricultural Society.—Ed. S. P.]

One of the most serious questions of the day is how can women secure profitable employment. It applies with more force perhaps to those dwelling in country places than to dwellers in the cities; and yet country women have better facilities for self-support than their sisters in towns and cities—first, because their expenses are not so great, and second, because there are more opportunities for them to employ their time and skill to advantage. Besides, many women who may fail to find employment in towns and cities may easily secure it in country places, where opportunities are more abundant. The choice of employments for women is much larger than is usually supposed. There are occupations in which manual labor is required that are open to women as well as to men, whenever the person interested has such acquirements and intelligence that she can direct hired labor successfully, and make her head-work serve to keep several pairs of hands busy. In the world's work, one

brain is worth a great many hands, and in seeking for employment the woman who has the tact and skill to direct uneducated laborers possesses a very great advantage in finding greater scope for her energies, and some capital, than can others who are obliged to choose some employment in which they can use only their own work. For instance, one person, with a pair of hands only, however great may be the capacity for management, and intelligence, and skill, can never make more than the work of one pair of hands can accomplish ; while one who is able to control and superintend three, five, or ten assistants, paying the usual price for the labor, has the ability to secure for herself the difference between the actual value of the work done and that of the value added to it by intelligent and skilful direction. Let me give an instance in which a lady well known to me has built up an exceedingly profitable business during a few years past. She was an excellent housekeeper, but was left a widow with a family to support. She had necessarily to cast about for some means of making a living for herself and children. Among her friends she had a reputation for making the best of jams, jellies, pickles, and other preserves ; and it was suggested to her that she should turn this accomplishment to a useful purpose. And so she did. First, her friends and acquaintances helped her to dispose of her products. She went to the markets and procured fruits, vegetables and suitable meats, and put these up in attractive form, and soon found the business growing upon her hands. Procuring a suitable house, she put up several stoves, and soon had a large part of it filled with apparatus for her work. A regular weekly advertisement in a newspaper which circulated among families where her products were largely used brought her many customers. After a few years her business has become permanently established, and continues to grow, while her present income is more than \$8,000 a year. She employs several men and boys, two wagons, and a number of girls ; and by the ability to find employment for all these hired assistants, she has a large profit or remuneration for her own skill in directing all this labor, and combining it to one end, and making each one's work as valuable as her own would be. Thus, as it were, she multiplies her own skilful work, and realizes a proportionate profit.

I wish to confine this discussion chiefly to such employments as relate more or less to the products of the soil ; for mother earth is the foundation of all wealth, and gives the most generous reward to those who depend upon her for support ; and this field of employment is the least cultivated, and offers the least competition to those who will work in it. All the other avocations of life, as teaching, writing, and the various employments arising out of commercial and manufacturing industries, are so much crowded that women are forced to seek new and unworked fields, and it is to such unused, and perhaps unthoughtof, opportunities that I would direct especial attention.

And in the Southern States there are the largest and most varied opportunities of this kind. It may seem strange that I, a resident of a Northern State, should assume to offer any suggestions upon this subject. But my business and profession for some years past have made me acquainted with the undeveloped

resources of the South and the necessities for women everywhere to enlarge their industrial sphere, and has given me a practical knowledge of the various industries in which women may, and do, to a considerable extent, find agreeable occupation and profitable employment. And further, being personally interested in Southern enterprise and having for years past been engaged in directing attention to the abundant but unworked fields of industry in the South, I feel convinced that I can offer some useful hints to Southern ladies in this way, as I have at times been able to do in less conspicuous ways.

I believe firmly in woman's rights to secure every good gift that a generous Providence has offered to mankind in the rich and teeming soil, and the valuable domesticated animals, and insects even, which have been given to the dominion of the human race for its use and comfort. As far as a woman's capabilities enables her, she may honorably use her hands as well as her intelligent brain. In many pursuits more or less closely connected with agriculture the peculiar natural disposition of women—their patience, their assiduity, their quickness of apprehension, their gentleness of manner, their perseverance, their deftness of touch and handling—all give them an advantage over the more impulsive, impatient and rougher sex. In the rearing of poultry, the keeping of bees, the cultivation of flowers, herbs and seeds, the cultivation of the mulberry, the rearing of silk-worms and the reeling of the silk, the work of the dairy and the preparation of choice butter (for which the demand is insatiable), the cultivation of fruits and vegetables of various kinds for sale fresh or for preservation by drying or cooking, and preparing for market in jars or cans, and even the keeping of fine cattle and sheep—in all these women may excel men by reason of their better natural gifts referred to. They have done it, and are doing it; and many bright examples might be referred to, and honored names of ladies known to me might be mentioned, if it were not that the privileges of acquaintanceship might be overstepped in doing it.

To particularize as far as may be, I might say that in poultry-keeping a profit of two dollars per head of the flock has been easily realized, and in favorable localities twice as much has been made. A hive of bees skilfully handled has returned ten to twenty dollars in the season in a Southern apiary. The consumption of flowers as an article of luxury, in the season when the supply is forced, is very large and the profit is great. The demand for bedding plants, roses and other flowering plants, is such that millions of dollars' worth are sent by mail every year, and a supply always creates a demand; for it is a great truth that thousands of people only realize how much they want a thing the moment it is offered to them; and a want once awakened grows by what it feeds upon. The culture of sweet and medicinal herbs for the grocer's and druggist's use is an industry scarcely as yet undertaken; while the making of extracts and tinctures is still an inchoate industry that offers a sure and certain profit. The growth of seeds of flowers and vegetables, which are always eagerly purchased by the seedsmen, and especially the culture of new varieties by crossing or by raising seedlings, offers great opportunities of profit, and the

most interesting and fascinating employment. Silk culture is essentially a domestic business, which finds work for the children in their spare hours, and the scope for it is very great, for the home manufacture of silk goods is now very large, while all the raw silk used is brought from foreign countries. The Women's Silk Culture Association, managed by ladies in Philadelphia, has already started this industry, for which there is no other portion of the country so well adapted as the Southern States. In the dairy, to-day, the prizes at exhibitions at the fairs are competed for by ladies, and the first premiums at the largest fairs in the country are more often taken by young women than by men. Skilled dairywomen are sought at high salaries by the creameries and cream factories; and to-day, I assert, from a large experience, that the Southern States offer the best field for enterprise in dairying in the whole of North America; the mountain region of the South, offering the best of lands at nominal prices, and the best of markets at its gates for excellent dairy products. Fruits are welcomed everywhere. The present facilities, offered by fruit-drying machines, make the production of dried fruits an exceedingly profitable business, and it is especially a domestic industry, employing children and young women altogether. The peaches, apples, small fruits and vegetables of the South are unexcelled for this purpose, while the products of these inexpensive machines sell for several times as much, on account of their greater sweetness and better appearance, as the common dried fruits. The preparation of jams and jellies from fruits too soft for shipment, and that are now wasted, and marmalade from the Southern oranges of the bitter varieties, that are now of no value, in other places and other countries now gives employment to hundreds and thousands of women and girls, and is a business which once begun in a small way, with adequate knowledge, will surely extend to very large proportions.

All these things have been done elsewhere where nature is not half so kind and affords not half such favorable opportunities as in the South. No good thing was ever offered in vain when it has been presented in the right way at the right time. But one thing is needful. I know the spirit is not wanting, for I have been in communication with many Southern ladies who have sought advice in these directions. Some help is needed, however, to direct weak and faltering steps at first; to make known the opportunities and to spread the information necessary to make these available. There is a State Agricultural Association in every Southern State. With some of the officers of these I am personally acquainted and know these gentlemen to be intensely anxious to develop all the valuable resources of their country. These institutions are for the general benefit; they are not for the men alone; why should not the interests of women be fostered and encouraged so far as women can take a part in profitable agricultural pursuits? There are schools and colleges for men, why should there not be departments for young women where all these industries, and others akin to them which may suggest themselves, shall be made subjects

for study and practice, so that the students may learn how to turn these pursuits to profit? The most prominent question now before the public mind is how to give to women the best opportunities for becoming self-supporting and independent, and surely if State Agricultural Societies can help men in their industrial pursuits, they can aid women in the same direction. It is not sufficient to merely point the way; the State must take women by the hand and lead them over the first difficult steps and afford them at least as much aid and encouragement as they have been giving to their fathers and brothers. There never was yet an instance in which women have shown themselves to be inferior to men, when opportunities have been afforded them to show their capacity and capability; and in respect of industry and energy in self-support, and in acquiring needed information, women have exhibited the brightest examples. Let us, then, in this respect point out a way and help them to walk therein with credit and success.

It is impossible, in the limits of an essay, to enter into practical instruction in the several pursuits referred to. This is indeed hardly necessary, because there are manuals and handbooks which furnish all the detailed information that may be required. But a few words in regard to the disposal of the products may serve to remove lingering doubts as to the feasibility of success in these pursuits.

First, as regards poultry. The mild climate of the Southern States is favorable to the production of eggs and chickens in the Winter. It is not difficult to change the habits of our domesticated animals and cause them to be productive at such seasons as we wish. There is an abundant market everywhere in the North and West in the Winter time, when ice and snow preclude the production of eggs and chickens. The usual market prices of eggs in the northern cities vary from thirty to forty cents per dozen, and eggs well packed in barrels can be transported safely and at very light cost. Early chickens sell in the Spring, when the southern vegetables make their appearance in the cities from Washington up, from thirty to fifty cents a pound. This market extends far into the West as well as through the North.

Second, as to bees. Bee products—honey and wax—are salable everywhere. But honey sells for double- and treble prices and far more readily when it is presented in an attractive form. Half pound sections of comb in neat glass boxes bring thirty cents each. One great point in disposing of produce is to meet the requirements of the most fastidious purchasers, who are not deterred by expense from satisfying every fancy; another is cheapness to meet the necessities of the great consuming class, who can dispose of an enormous supply when the price meets their abilities. The long honey-producing season and the short Winters of the South double the producing capacity of bees; while the abundant forage can supply a very large stock. Honey is sent to northern markets from Texas and Louisiana, and sells well when the northern bees are being fed; while a vast quantity of honey (and glucose, too, sold for honey) is shipped to England and other European countries. The cheapness at which honey can

be produced in the South gives it the world for a market, and there are shipping ports on the Atlantic coast within easy reach.

Third, as regards flowers, herbs, and seeds. The South is rich in varieties which afford the most valuable oils and extracts. The climate is such that repeated crops can be grown in one season, and the products made proportionately cheaper. Dried herbs of various kinds, dried flowers, and essential oils are used everywhere at home and are largely shipped abroad. The tons of orange peel wasted in the South and the abundant flowers yield oils of very great value; the oil from the bitter orange, for instance, selling wholesale for \$4 a pound, and that from the flowers bringing from \$30 to \$70 per pound. Every pound of Chamomile flowers used in this country is imported, and costs from thirty to forty cents. A large quantity of fragrant herbs is used in the preparation of the high grades of southern tobacco, but not a pound of it is grown in the South.

Fourth, as regards silk culture. In one northern city alone there are 120 silk factories, and whereas years ago none but French silks were sold in the stores, now American silks, velvets, ribbons, handkerchiefs and sewing silk have largely supplanted the foreign goods, and the manufacturers are anxious for a home supply of the raw material. Enough of it has been produced and used to show that it can easily be made superior to the foreign article, because of the greater intelligence and skill of American producers. Every pound of cocoons or of reeled silk can be sold as readily as cotton in the markets.

Fifth, as to dairy products, nothing need be said, except that the great producing season in the South is the winter, when the product in the North is cut off by the severity of the weather, and when the price of a good quality of fresh butter sells at twice or three times the value of the summer made.

Lastly, as regards fruits. An enormous trade has sprung up in the last few years with England. Canned and preserved fruits, and dried fruits and jellies of American manufacture sell readily, and the market for them, not only in that country but in Europe, has as yet scarcely been opened. It is only a question of quality and appearance to make an unlimited market for these products, while there are several kinds that are grown in no other part of the country, and of which the South has a monopoly.

Indeed, there need be no fear of the want of a market for any food product that can be produced at a reasonable price. And the South has the rich soil, the warm sun, and the long season, which will enable it to compete with any other portion of the world in producing articles of common use either for food or clothing, or for luxury; and let me say that the history of the South, during painful years now happily past, has shown that southern women, when occasion calls for it, have exhibited the most exemplary courage, patience, industry, perseverance, and quickness of apprehension; all qualities of the greatest value in those emergencies which occur in our lives from time to time.

But there are other pursuits open to women which offer great opportunities. The study of the sciences which relate to all those pursuits that are more or

less closely connected with agriculture is not only charming and ennobling in itself, but offers profitable employment. It occurs to me to mention a few instances which are quite pertinent to this subject ; and I know from the character of the ladies whose names I will take the liberty of mentioning that I shall be justified in doing this. I would mention Miss Howard, the accomplished daughter of a gentleman, Dr. C. W. Howard, of Georgia, with whom I had a pleasant acquaintance, and who was the author of a valuable manual on the cultivation of grasses and forage plants in the South, and who was much indebted to his daughter for help in his investigations, studies and writings. This young lady I know has done valuable service in continuing her father's labors after his death. Another lady is giving her attention to botany in that interesting field of labor and exploration, the southern mountain region. Another lady, Mrs. Treat, formerly of Florida, but now of New Jersey, has made valuable contributions to botanical science, and her written articles have been sought by various journals and magazines at amply compensatory prices. This estimable lady recently honored the meeting of the American Association for the Advancement of Science with her presence, and was by no means the least conspicuous lady among the many who took part in the proceedings. Who has not heard of Miss Mitchell, the astronomer and botanist, whose name casts a lustre upon the South ? An English lady, Miss Anne Pratt, is the author of a beautiful botanical work with colored illustrations, which ranks very highly in the list of such works. Another English lady, Miss Ormerod, holds the high position of entomologist to the Royal Agricultural Society of England, and her name is favorably known wherever our language is read. Many others occur to me, but I need no further instance to show what a vast field is open to women in all these studies and pursuits. The eager thirst for knowledge of anything new in these directions, and all others akin to the great art of all arts, the cultivation of the soil, and the production of food and clothing, is such that useful information is sought, and well paid for, by the hundreds of practical and scientific journals which are devoted to these interests. Hundreds of ladies make a comfortable income in this way, and one well known to me has for several years supported an invalid husband, and has well educated her children from the profits of her graceful and ready pen.

You may ask, but how are these opportunities to be reached and seized ? Let me say that in every State there is an Agricultural College endowed by the United States Government for the purpose of giving an education in all these branches. Every young woman in the land has an equal right with her brothers in this public endowment, and may claim her just share in it. Let her demand her right ; study the inner life of nature, and choose one of the most agreeable and best suited branches of natural science, and fit herself by proper application to become a teacher of it ; and at the same time practice as much of some affiliated industry as may be best suited to her natural talents and disposition. A successful poultry-keeper, bee-keeper, dairy-woman, florist, fruit-grower and preserver, even a good housekeeper, may thus use her pen with good profit.

Art, too, in this direction claims its numerous votaries. I know a young maiden, scarcely arrived at womanhood, who has received a \$5,000 commission to carve a wooden mantel for the palace of a millionaire. Flowers, ferns, leaves and fruits are the fittest subjects for the graving tool, and so they are for the painter. I once, upon an early morning, came upon a purple anemone in a wood pasture, and in the centre of it glistened a single dewdrop like a brilliant. Such a subject transferred to paper or canvas by a skillful hand would have easily brought \$50; while the leading chromo-lithographers pay handsome sums for sketches of fruit blossoms, delicate tracery of ferns, mosses and grasses, and such small works of art. No one knows how many mistresses of this and other kindred arts are undeveloped in young girls. It is a sense not yet awakened; an inner consciousness as yet undeveloped, because it has not yet been stirred into action; but let the gentle breeze of opportunity come in contact with the cords of native capability, and like the sweet strains of the *Æolian* harp in the window, the whole soul will break forth into the melody of accomplishment.

My object is but to present this subject to the thoughtful women and men of the South. Women cannot do all that is required alone. I want to show what may be done, by what is being done; and to point out what aids may be looked for from men, for the help and aid of women. The agricultural associations may do very much by affording opportunities, and by encouraging young women to acquire the needed education. The Virginia State Society has nobly opened the way in evoking and encouraging suggestions by practical thinkers and writers, and hoping that its example may be widely followed, and may lead to fruitful endeavors, I offer these few helps thereto.

Report of the Committee of Examination and Award.

The following is the report of the committee appointed by the authorities of the State Agricultural Society to read the essays of those competing for the prize of \$25 offered by Mr. Joseph M. Blair, of this city, for the best essay on "Self-Supporting Employment for the Women of the South." It is understood that in accordance with the recommendation of the committee a number of the essays will be published in the *Southern Planter* and *Industrial South*:

The committee appointed to decide on the essay for which Mr. Joseph M. Blair, of Richmond, offered a premium of \$25, beg leave to present the following report:

The subject of the essay was to be "Self-Supporting Employment for the Women of the South," and the large number of essays on this theme submitted to the committee, over seventy in all, and the widely separated quarters of the country from which they come, attest the earnest and extended interest that is felt in the subject. The committee read and considered these essays with much attention and deliberation, and they desire to testify to the very high merits of many of them. They firmly believe that the publication and general distribution of at least one-third of them, replete as they are with ripe thoughts and practical suggestions, would be highly beneficial to the women of the South.

It was no easy matter to make a choice among so many papers, each having

some peculiar excellence of its own. The paper signed "Pastor Corydon" was admirable in its recommendations and its spirit; that of "Millicent" full of sensible and varied suggestions, and those of "Veritas," "Mrs. Browne," "Eliza C. Hall," "Poor Richard," and others that might be named, wise, and thoughtful, and earnest. At the final conference of the committee the choice having narrowed down to those signed "Pastor Corydon" and "Millicent," was determined in favor of the former; when a gentleman, who happened to be present, Hon. Albert D. Shaw, United States Consul at Manchester, England, requested the privilege of offering a premium of \$10 for the second choice of the committee, which being accepted with a vote of thanks by the committee, the second premium was awarded to the writer of the essay signed "Millicent."

To George W. Mayo, Esq., Secretary of the Virginia Agricultural Society.

Mrs. RALEIGH COLSTON,
Mrs. C. R. BARKSDALE,
WILLIAM C. KNIGHT,
JAMES McDONALD.
Committee.

To Joseph M. Blair, Esq., Richmond, Va.:

Dear Sir,—I forward herewith to you the report of the Committee on Essays on "Self-Supporting Employment for Southern Women." "Pastor Corydon," the successful essayist, is Henry Stewart, of Patterson, N. J.; "Millicent," to whom the second prize (offered by Mr. Shaw), was awarded, is Mrs. L. G. McVean, of Greenville, Montcalm county, Mich. In doing this, I cannot refrain from speaking of the remarkably earnest, prompt and cheerful manner with which the committee to whom the essays were referred have performed their very arduous duties.

Yours very respectfully,

GEORGE W. MAYO,
Secretary of Virginia State Agricultural Society.

MUSEUM OF NEW YORK HISTORICAL SOCIETY.

I spent a very pleasant afternoon one day last week. Accompanied by my New York friend, Sykes, I visited the rooms of the New York Historical Society. The rooms contain a very large library, a splendid collection of paintings, including the portraits of the great men of this country, all of the portraits being of men who are dead and gone; a large collection of Aztec relics from Central America, and still a larger collection of Egyptian curiosities. It would require a whole day to properly examine the Egyptian relics alone, so numerous and interesting are they. There are more than a thousand different articles, from a large mummy of a sacred ox, done up in stuff like coarse bagging and tied up with ropes, down to the rings and necklaces adorned with which the Egyptian ladies cavorted about. There is a splendid mummy of an Egyptian priest standing up on end in one corner, which looks as bright and fresh as if he had only been painted last week. His mummy is really not in sight. It is inside, however, it being wrapped up in hundreds of yards of linen, and then placed in a tight-fitting wooden case, which retains the shape of the body. A face intended to represent the deceased is painted on the outside, and is calculated to inspire the spectator with any feelings but solemn ones. If the deceased

could see himself as others see him, he would certainly laugh, or perhaps get mad, for the face and general appearance is strongly suggestive of the Jack of Diamonds. I dare say he was a very good man in his day, and it is a shame that whoever put him up should fix him for posterity in such an absurd manner.

The entire outside of the mummy case is covered with small hieroglyphics, which the gentleman who showed me around said was a complete biography of the deceased. My impression is from some of the figures that the reverend gentleman was more or less mixed up in a social scandal. It is, however, a little too late for him to take the stump for Cleveland. I mentioned this to Sykes. He got mad, and said there was no truth in those lies about Beecher; that he, Sykes, was a member of Beecher's church, and knew what he was talking about. I had no idea Sykes was that kind of a man. I must cut his acquaintance.

Leaving the wretched mummy to shift for himself, we proceed to inspect the other curiosities. Here, in a glass case, is what seems to be a handful of chicken feathers. Among them is a long, crooked bill, like that of a Texas curlew such as infest the neighborhood of Tiff Johnson's ranch near Austin. By reference to the catalogue we find these feathers are those of the sacred ibis, a bird which the Egyptians worshipped. It was as venerated by the Egyptians as much as quail on toast is with us, after the bill has been brought in.

In the next case are a number of *adobes*, such as the Mexicans use for bricks. Some of the old houses in San Antonio are built of these *adobes*. They are mud bricks, about the size of a full-grown family Bible. Some of them have been baked in an oven, while others are waiting their turn to be baked. On referring to the catalogue we find these are none other than the identical sort of bricks that the Israelites were obliged to make for nothing and board themselves. This fact is attested by rude hieroglyphics scratched on them while they are soft, and by the fact that they are full of straw. Imbedded in the mud, dozens of short pieces of straw are plainly visible. Even the prints of the fingers of the men who handled those bricks are visible on one of them. Nothing in that collection brings the remote past so near that you can almost smell it, as do these Egyptian *adobes*. You feel as if you could almost reach out and shake hands with Moses and the prophets, and ask them to join you in changing your breath at a saloon; and when you get outside you look at the first Jew you see standing in front of a clothing store with an interest you never felt before. Those bricks are not of as convenient size to throw at a policeman, or an unpopular candidate, as are the modern ones.

What sort of a box is that in the next case? It is about a foot long and four inches wide. The top is marked off in thirty-six squares like a checker board. The lower part of the box contains a drawer, which being pulled out half way, reveals an equal number of round square checkers of porcelain. The box was found at Thebes in a tomb thirty-six hundred years old. It is of cedar wood, and is nothing more nor less than a box of checkers with the board on the outside, so it seems that even in those ancient days there were people who used to kill time in their leisure moments.

In the same case where fragments of nummies from Thebes. There were skulls, hands, and feet which had been broken off, for what was once flesh and blood, pulsating with life, are now as light and brittle as it is possible for any substance to be. Here are the feet of a little girl who ceased to toddle around, or to climb up into her mother's arms to go to sleep when tired, more than three thousand years ago. And no doubt her mother was alive when she died, for those little feet, scarcely the length of your hand, are encased in white kid shoes. Even the tiny shoes were too long, for when the poor little dead feet

were gently thrust into them, the toes did not quite fill out the shoes, for the white leather, now yellow with age, is wrinkled up, and shows just how far the toes reached. One of the shoes is torn, and displays one of the small, delicately shaped toes, on which even the nails are visible. Perhaps those spots, which are brighter than the rest of the wrinkled leather, was made by scalding, blinding tears, for tears are older than the pyramids. *Quien Sabe?*

And right here is the skull of the same mummy. The mummy clothes have been removed, and the sightless apertures, where once were bright eyes, stare at the inquisitive visitor, but the hair remains just as it was when she was laid away, long before Romulus and Remus were suckled by the wolf. The hair, dark brown, is braided in numerous plaits, and wound around the head like a crown, being curiously interwoven with bead network.

We go on to the next case, and the first things I see are what I suppose to be boys' school slates. The frames, the dark color of the slates, and their size are identical with slates over which the American school boy fumes in his efforts at long division. They are not slates at all, but are account books. They are of wood, and the black surface is made by spreading black wax over the wood, the characters being made by scratching the surface with a piece of copper wire, called a stylus.

Here is a thin board covered with awkwardly shaped Greek letters, in black ink. This is a boy's slate. A long time ago, before General Lee surrendered, one of the Ptolemies conquered Egypt, just as the German overran Alsace, or the Federal troops the South. General Ptolemy undertook the reconstruction of Egypt, and in order to facilitate matters he did what the Germans are doing in Alsace. He forbid the use of the Egyptian language in the public schools. The little Egyptians had to learn Greek, and these awkwardly shaped Greek letters were their efforts in that direction. Wonder how the little Egyptians relished it. After our own unpleasantness, during the period of reconstruction, the school books in the public schools of the South conveyed northern ideas about the patricidal struggle. Verily there is nothing new under the sun, unless it is Mrs. Belva Lockwood running for President of the United States. I don't think that ever happened before.

Here are a number of wisps or brushes made of date fiber. They were used in driving flies. It will be remembered that one of the most persuasive arguments used by Moses to persuade Pharaoh to let the children of Israel go, was a plague of flies and insects. I suppose there must have been a lively demand for these wisps. And here, from an Egyptian tomb are some fine combs. It made me laugh to see that except that they are longer and coarser, they are identical with modern ivory fine tooth combs. They are made of wood, and with the teeth quite close together on one side, and wider apart on the other. According to Holy Writ an insect plague was also brought to bear on the stiff-necked Pharaoh, and judging by the spaces between the teeth of these ancient combs, the insects must have been larger than those of the present day.

But I expect you have heard enough about mummies, etc. Nobody pays much attention now-a-days to the ancient Egyptians. They can't vote. If a person, however, has time, it is well worth while to examine the upwards of a thousand articles exhibited from the land of the Nile, among them bronze mirrors, battle axes, linen cloth, papyrus, shoes, sandals, false-hair, jewelry, little baked gods of clay, appropriately inscribed, mummified cats, and many other article too numerous to mention. Has it rained yet in Austin?

Yours truly,
ALEX D. SWEET.

—*Texas Siftings.*

THE SUPREMACY OF GRASS.—The great arable crop of the country is maize, worth three-fourths of a billion last year, but the value of grass was very much greater. That portion which is cured for winter use is small compared with what is gathered by the farm animals themselves, in summer, and in every season of the rolling year. It is not the grass farm in England that fails to rent, but the arable grain and turnip lands on which the pinch of competition falls soonest and hardest. Illinois has mainly gone to grass, except about a fourth of the area given up to corn, and prospers in proportion to the extent of verdure. Iowa is fast following the example, and is reaping the reward of this stroke of rural economy. Southern Wisconsin and Southern Minnesota are rapidly extending mowing and pasturage, and enlarging flocks and herds, and establishing butter and cheese factories. The South is beginning to think better of grass; there is a field for enterprise in dairying and meat production on the Alleghanian plateaus and slopes which will one day make the fortune of multitudes. Land can be had, at nominal rates, capable of growing clover and orchard grass, in a climate healthful and comfortable as any in the United States, where a near market for butter and cheese at high prices could be enjoyed until competition should equalize the superior advantage.—*N. Y. Tribune.*

PLANTS FOR THE WINDOW GARDEN.

Most housewives try to raise too many kinds of house plants. Four or five good, strong plants of geraniums, which will make a compact show in the window, are usually preferable to a single plant of each of half a dozen varieties. "Variety is the spice of life," however, and to a certain extent, it is true of the window garden. Enough variety can usually be obtained from six to eight different plants in an ordinary window. For winter blooming, the following plants will be found desirable: One rose geranium, one heliotrope, three Chinese primroses, one sweet alyssum, one calla, two Azalea Indica, one English or German ivy, either Agrippina red or Hermosa pink. The Chinese primulas are especially desirable for winter, as they will thrive with less light than most other plants. The roses need much light, and, unless it can be given them, their place had better be filled by primulas or other plants. Bouvardias, if well grown, are usually favorites, and as they endure the dryness of living rooms, one plant might be substituted for a rose or primula in the above list. It has been our experience, that housewives do not have the best of success with bouvardias. Fuchsias are desirable for spring blooming, but, as usually managed, they are not a success. Azalea Indica is a fine window garden species, and under ordinary treatment will give a mass of bloom during the entire month of March and April.—*Mo. Hort. Report.*

WEEDS IN GRAIN STUBBLE—It is almost impossible to eradicate weeds so that some will not come up in grain stubble. If the field has been seeded with clover so that it is not advisable to mow it, these annual weeds should at least be cut down to prevent seeding.

KAINIT AND ITS VALUE.

Among the fertilizers that are less known to the general farmer than it should be, and hence not properly appreciated, is the German Kainit. Its use in Germany has become quite general, and in this country its use is rapidly increasing as its value is becoming better known. Kainit is a mineral salt found in Germany at a depth of from 300 to 1200 feet below the surface and in such abundance as to be practically inexhaustible, being found and mined near Strassfurt; it is also called Strassfurt Salt.

Its great fertilizing power is largely due to the large amount of sulphate of potash it contains as well as other chemical salts. It is imported into this country finely pulverized, and put in sacks of 200 pounds each, and is of very easy application.

I copy from Bulletin No. XXVII of the New Jersey Agricultural Experiment Station, its report of the amount of potash that kainit contains. "Station analysis No. 411; Kainit, Alexander Kerr & Bros., Philadelphia; Potash per 100 pounds of Kainit 12.80 pounds; cost of potash per pound 03.9 c; cost Kainit \$10.00 per ton."

I give the analysis of that of Alexander Kerr & Bros. because it is first on the list and also being superior. A full analysis gives the following composition per ton of 2,000 pounds.

Sulphate of Potash,.....	496	pounds.
" " Magnesia,.....	286	"
Chloride " " ,.....	252	"
" " Sodium, {	640	"
Common Salt, {		
Moisture,.....	288	"
Insoluble,.....	38	"
<hr/>		
Total,.....	2000,	"

It will be seen by the analysis that the quantity of the Sulphate of Potash is very large, and that of the Sulphate and Chloride of Magnesia also large. The salt, 640 pounds, is also in most cases valuable, leaving only the moisture and insoluble matter a trifle over 300 pounds that is valueless. The manurial value of the potash in Kainit can be easily understood by comparing it with ashes. Unleached ashes, as usually sold in moist condition, contain, on an average, of not over 5 per cent. of potash, or 100 pounds per ton.

Kainit, by the Station analysis, contains 12.80 pounds of potash per 100 pounds or 256 pounds per ton. Leached ashes often contain less than 30 pounds per ton of potash. Kainit at \$10.00 per ton, good wood ashes should, to be equal, be worth \$4.00 per ton. The value of Sulphate and Chloride of Magnesia, supplying as they do Chlorine Sulphuric acid and Magnesia, in soils that are deficient in them is sometimes worth the cost of the whole. Kainit is also valuable to mix with compost or for stable use, to absorb bad smells or prevent the escape of free ammonia.

For the above uses it is superior to land plaster, being more soluble, and also from the disposition of the Sulphate of Magnesia with Ammonia to form a double salt of Magnesia and Ammonia, fixing all escaping smells and free Ammonia.

Kainit, similar to ashes, is caustic, and must not be put in contact with the roots of plants, for when applied in so concentrated a form it will burn the plants as quickly as ashes. The best plan to apply Kainit is to sow it broadcast over the land as evenly as possible at the rate of 200 or 300 pounds per acre, as long before the crop is planted as possible, but if that cannot be done it can be sown after the crop is planted, and will mix with the soil while cultivating the crop. I have used six tons of Kainit on corn, beans, potatoes, and buckwheat with the best of results at the rate of 500 pounds per acre. A smaller quantity oftener applied will be better in most cases.

On fruit trees its value cannot be over-estimated, especially on peach trees. I have a small orchard of 300 one year old peach trees, that before I used the Kainit were yellow and sickly looking. The leaves were all curled, and were so hopeless looking that I was advised to dig them up and burn them. I applied 500 pounds of Kainit broadcast per acre, and as much more in a circle of four feet around the tree, carefully spread, and on the balance I used a peck of fresh wood ashes to each tree.

The change made by the Kainit was complete. No finer growth of wood and leaves can now be found. The trees where I used the ashes were, after a fair trial, so far behind the others in vigor and health, to save them I used Kainit also, but as yet are behind them in growth.—

By Eli Minch, Shiloh N. J.

DRESSING SHEEP.

Many farmers are deterred from the use of mutton on their tables from the wool taste of the meat when killed at home. The reason of this is almost wholly in the manner of dressing. To obviate this all that is necessary is the exercise of care. Allow the sheep or lamb no food for twenty-four hours before slaughter, but allow all the water it wants. Just at nightfall having everything prepared, seize the animal, hang up by the hind legs, cut the throat, being sure to sever all the arteries of the neck. As soon as dead, disembowel at once and then skin quickly and without allowing the wool to touch the flesh. Spread the quarters to cool the carcass as quickly as possible, hang in a cool, sweet place, and you will not be troubled with woolly-tasting mutton.

—*The U. S. Veterinary Journal*

MANURING IN ADVANCE.—So far as possible manures should be applied at least a year before the land is to be plowed. Sod land well top-dressed now or any time this Fall will have its fertility thoroughly distributed through the soil by Winter rains, and will be in excellent condition to plow for corn or potatoes next Spring. The manure applied now will do twice as much good as that put on just before the land is to be plowed.

VARIETY OF THE VINE vs. SOIL.

MESSRS EDITORS.—The question, which kind of soil is the best suited for the cultivation of the vine, has for some time been and is just now employing the minds of the Virginia viticulturists and particularly of your correspondents much to the neglect of an infinitely greater importance—that of the varieties of grapes.

I will in this article, as I love to do, quote some utterances of my favorite author, Dr. Jules Guyot, which are so very appropriate to the subject, and draw from them conclusions which are best adapted to the circumstances in this country.

The vine is one of the easiest plants to multiply and cultivate in all sections of the Northern hemisphere lying South of a certain irregular line. It may and does vegetate perfectly North of that line, but there it matures its fruit only in very exceptional situations, with particularly careful cultivation and the application of protecting means, which increase the cost of its culture beyond the paying limit.

The calcareous, silicious, aluminous and magnesian soils, the primary, transition, secondary, tertiary and volcanic formations, no matter if red, gray or black are all equally suited to the cultivation of the vine in general, provided that they are not impregnated with water, and that they do not occupy low situations where the fogs collect and remain for some time. The excess of moisture in the soil and the atmosphere is in any kind of soil unfavorable to the vine.

The vine is very well suited to poor, barren land, pervious to air and water, on which few other plants could live. Before a long experience revealed the richness of the vine and caused the extension of its culture to the richest land, it was considered to be intended to occupy only the most sterile soils, and some of the very best vineyards, and the oldest besides, are yet located on land of which agriculture proper could draw no benefit whatever.

The vine is of such a vivacity and power of growth that in almost all climates and on all soils it hitches its tendrils at prodigious distances. From the gigantic arbor of Hamptoncourt near London to the vines reaching across the largest streams of Africa and South America, everywhere the vine can be seen to cover from a single stem a large space and to live for centuries.

Everywhere the vine can also be seen under the control of the vineyardist maintaining itself, though reluctantly, within a few square yards, and to live in that condition healthy and hardy for a number of years.

Upon cliffs and trees, against walls, running on the ground, creeping under the ground, wild or disciplined, free or tortured, the vine lives everywhere and resists most anything, provided that the part of soil, food, air, and sunshine, which it positively needs, is furnished to it.

But it is not sufficient that the vine lives, it must bear fruit, it must bear it abundantly, of good quality, and under such conditions that a considerable, regular and permanent profit will be the result of its culture.

That result is dependent much more on the quality of the fruit than on the quantity and thereof *first of all* on the variety of the vine, than on proper and intelligent culture, and only indirectly on the kind of soil and some other conditions.

Like most useful and agreeable plants which man has multiplied and perfected by cultivation the vine has its species and varieties, and these have essential and distinctive qualities and characteristics, which they preserve in all kinds of soil. The soil can and does improve or impoverish these qualities and character-

istics, yet it cannot transform one variety into the other, nor invert their order of superposition. The best soil cannot transform the crab apple into a pippin, nor the wild pear into a Barlett, the Concord into a Nortons, nor the Gamai into a Carbenet, Sauvignon nor a Pineau.

The grand vineyards of the Medoc, the *cote d'or* on the Rhine have deserved and preserved their great reputation only indirectly on account of the superiority of their soil, but chiefly because they were endowed by intelligent men with the most superior varieties of vines, and these vines have ever since been the pride of the proprietors and the object of a veritable veneration. If the vineyards were planted in Gamai, Gouais, Concord or any other inferior grape, they would furnish only an ordinary wine, while, no matter on what kind of soil and in what country the Carbenet, Sauvignon of the Medoc, the Franc, pineau of Burgundy or the Riesling of the Rhine are planted, they will invariably make a good wine, which is true to its noble origin and reminds of the fine wines of the Medoc, Burgundy and the Rhine, though they will be of more or less value as the kind of soil, climate, exposure, the season, the culture of the vine and the mode of making the wine have a real and incontestable influence on the validity, the richness, the bouquet and the savor of the wine. That is, soil and climate are more or less adapted to develop the salient points of the characteristics of the varieties of grapes, and consequently of the wine which they produce.

The three noblest of all varieties mentioned above were actually planted in Hungary, Italy, Spain, the Island of Medeira, the Cape Colony, Australia and California, but though good wines were made of them everywhere, no climate, soil, nor other conditions have been found yet, and perhaps never will be found, which are adapted to develop their characteristics to such perfection as those of their respective homes in France and Germany.

It requires entirely different ingredients in the soil to develop the characteristics of white and of red-wine grapes, and it is by no means incidental that the best white wine of the Bordelais is produced in the vineyards of Chateau d' Yquem and the best red wines of the same district in the vineyards of Chateau Lafite, and it is more than uncertain that these vineyards would have ever acquired their reputation if inadvertently the first one had been planted in black and the latter in white grapes. The same is the case in other wine countries, and it is not at all incidental that the vineyards of certain sections and localities of Europe furnish either white or red wines.

The question is, not "which kind of soil is best suited for the cultivation of the vine?" but which soil is best adapted to develop the distinctive qualities and characteristics of a certain variety of grapes, or vice versa, which variety is best suited to a given soil.

LOUIS OTT,

Greenfield, Nelson Co., Va., Oct. 7th, 1884

In Monticello Farmer and Grape Grower.

THE USE OF LIME.

It is a sort of axiom among farmers that "where lime is used the land and the farmers are rich." This is an old but true adage and deserves to be made one of the established axioms of agriculture. It is true in two ways—one, that lime is an exceedingly valuable fertilizing agent of itself, and in addition exerts a most beneficial influence upon the soil as a solvent of the silicates, chiefly of potash, and also in decomposing organic matter in the soil and favoring its nitrification and the production of the indispensable nitrates which so

greatly enrich the soil, the other that its use is one of those higher attributes of skillful farming which is consistent only with the best culture of the soil and the most thorough and systematic working of it. It is, in fact, in the farmer's hands, one of those instruments which is rarely or never found excepting where every part of the farm work is done in the most excellent manner, so that it is not so much that the farmer uses lime as that he uses it as a part of a system of farming which is thoroughly excellent, and, of course, very profitable. Lime is thus not to be used in a haphazard way, and simply to extract from the soil the last vestiges of fertility it can bring out. When thus used another common adage, that "lime enriches the father and impoverishes the son," will surely be found true, because it is like a last turn of the screw which squeezes the last drop of juice from the cider mill.

The place of lime in good farming is its application to the land at the Fall season when rye or wheat is sown and grass and clover seeding follows. The land has then become more or less supplied with organic matter from the roots and waste of previous crops, and it has accumulated a store of nitrogenous and carbonaceous matter which cannot be made available until it is decomposed nor until a sufficient quantity of mineral matter has been set free in the soil to balance the supply of plant food required for a new rotation of crops. Besides, at this season and with Fall grain the regular manuring of the land is given, and the manure is generally coarse and undecomposed. It is precisely under such conditions that lime is of the greatest use and value and fits the soil for a new round of crops.

The quantity of lime usually applied is 40 to 50 bushels per acre of freshly burned or stone lime. In the air-slacking by which it is prepared for use it swells to three times its original bulk and becomes a fine powder which is spread from a wagon, with a long handled shovel, evenly over the soil. This should be done upon the plowed land immediately before sowing, when it is harrowed in previously. As lime is quite soluble in this fine condition, requiring only 700 times its own bulk of water to dissolve it, it should never be ploughed in, or it will be very quickly carried down into the soil below the reach of the roots of any plants, excepting those of clover. Clover is one of the plants which are wonderfully benefited by lime, and it is for this reason among many others, that its use is to be encouraged, because it provides the skillful farmer with one of the most valuable sources of manure, viz., a heavy clover sod to be plowed in.—*New York Times.*

HOW OPIUM IS SMOKED.

Everybody has heard how opium is smoked. The smoker lies curled up, with his head resting on a bamboo or earthenware pillow about five inches high. Near him stands an opium lamp, the flame of which is protected by a glass shade low enough for the point of the flame to project above the top of the shade. The smoker takes a wire and dips it into a little box containing prepared opium. A small quantity adheres to the point of the wire which is then held over the flame of the lamp until the heat has swollen it to about ten times its original size. This is rolled over and over on the flat side of the clay bowl, the opium all the time adhering to the wire. When it has been rolled to a soft, solid mass it is again applied to the lamp, and this alternate roasting and rolling is kept up for at least ten minutes, by which time it is in the shape of a pill and ready for use. The aperture in the pipe is so small that it can only receive the smallest quantity, and the most careful manipulation is needed to transfer the

tiny ball of opium from the end of the wire to the bowl of the pipe. The point of the wire is inserted into the hole of the pipe and worked round and round till the soft opium forms into a conical-shaped ring around the wire. By twirling the wire the drug is gradually detached from it, leaving a hole through the opium about as large as the whole of the pipe bowl, with which it communicates. The pipe is now ready, and the bowl is held over the lamp so that the opium comes in contact with the flame. A spluttering noise ensues as the smoker sucks at his pipe. After each successive draw he ejects from nose and mouth a volume of smoke, the very smell of which is enough to turn a horse's stomach. By the end of the fourth or fifth whiff the pipe is empty. The smoker scoops out another dose of opium, rolls it into a pill and repeats the operation with the same patience as before, and smokes away until the pipe falls from his hands and he is lost in dreamland. One thing is very certain, that if tobacco-smoking were only half the trouble, tobaccoconists would soon have to shut up shop.—*New York Weekly*.

HOW SHOULD BUTTER BE SALTED.

It is acknowledged by the majority of our dairymen that we have not as yet discovered the proper method of salting butter. Each individual has his own peculiar method, although more or less similarity exists among the whole. The question is whether the milk can be worked out of the butter entirely without danger of injuring the quality. That the old practice of working the butter intimately with a paddle is improper is now conceded, the simple pressure being considered better, which forces out the milk without injuring the texture. Salting the butter is done when it is removed from the churn, and at time of working it, the butter being left to remain a short time previous to being reworked. Later experiments on the part of the dairymen, however, demonstrate that with the revolving churn, the butter may be salted and worked at one operation by adding a moderately strong brine to the butter after the milk has been drawn off. The butter and brine together revolved in the churn, the result being that the salt in a liquid state has a quicker and more direct action, forcing the milk from between the particles of butter, washes it completely and dispenses with the second working, and the use of the paddle or worker. The claim, however, is a new one in some respects, and is liable to lead novices into the error of supposing that but little care is necessary to remove the surplus milk and properly salt and preserve the butter for use. As butter is insoluble in water or brine, certainly no injury can be done it, and by diluting the extraneous matter in butter there is no doubt that it escapes more freely and with greater ease. When the drysalt is used for the butter, and is incorporated with it by the use of the paddle or worker, the removal of the surplus milk is very gradual, and we must not overlook the fact that an evaporation occurs to a certain extent, whereby a residuum, or solid matter, is left, which cannot be removed except by the use of liquids. When the brine is added to the butter in the churn the double benefit of incorporating the salt with the butter and diluting the milk occurs, and it should consequently be an easier method.—*Farm, Field and Fireside*.

FARMERS AND OTHERS who have cisterns or wells the water in which has a bad smell, should not omit trying what effect aeration and agitation will have. The "Old Oaken Bucket" may not be as convenient as the modern pump for drawing water from well or cistern, but is a great purifier of the liquid brought up in it.

A VIRGINIA SHOW, NOT ADVERTISED.

Merit is modest. This is too true in Virginia, where the public interest would often be advanced by making known to the public what is known only to the few.

There lives in Virginia an old bachelor farmer, on a broad domain with buildings that cost forty thousand dollars, built mainly a hundred years ago by an ancestor, and fitted with corresponding furniture, library, paintings, &c., such as are never seen outside the stately homes of England.

The farm stock correspond to the establishment, and so far surpass it as to be unique. The cattle and horses are real wonders.

Here, in the utmost simplicity of life and manners, dwells our bachelor friend; and as he has neither wife nor child to pet, he pets his dumb animals, who are all his friends. They are truly his friends, for they love him and never deceive him. The law of love, expressed by gentleness, is the law of this establishment. It is a beautiful and most edifying sight to witness our friend moving among his herds and droves and flocks and hives, with a gentle gravity which neither stirs nor startles the least. They all have confidence in his friendship. He fondles the sheep, pets the colts, milks the young heifers unworried, plays with the terrible bull, and handles, unharmed, his fifty swarms of bees. The dumb creation have been educated by love most wonderfully. Whips for horses and oxen are not needed and not allowed. The beasts obey without compulsion. Bounteousness feeds them and gentleness cares for them, and in their mute but gentle way the dumb creation bless the benign medium of Providence. Herein is stewardship and herein is worship—man made in the image of God, caring for the creatures of God. And such is the will of our Father.

And behold the result! Development and perfection such as has probably never been seen before in the world. No, not in the old world nor in the new; not in the past nor in the present. No record nor tradition mentions any comparable perfections in horses and cattle.

There is a red ox which weighed, August 4th, 1884, twenty-six hundred and ten pounds, and will probably weigh during the present year three thousand pounds; age, about eight years. There is a milk-white ox, without a colored hair, and perfect in form from horn to hoof, that weighed three thousand pounds August 4th, 1884; and when seen October 10th, 1884, had increased to about thirty-four hundred pounds, and seemed likely to reach four thousand pounds during the present year. The Percheron colt, Matchless, weighed one thousand pounds

the day he was a year old, and he is indeed well named Matchless; he is now about four years old. The Percheron colt, Hugo, at nine months old weighed one thousand and fifty pounds, at eleven months he weighed twelve hundred and thirty pounds, and at twelve months old he weighed thirteen hundred and forty pounds. Hugo is perfection in form and action.

These thoroughbred Percheron horses belong to that historic race which is everywhere coupled with chivalry, and to whose courage, endurance and weight is largely due the almost inconceivable deeds of warriors in battle. They, like the Spartan infantry, matchless of their kind, have been bred to war for a thousand years. They made the Norman knight irresistible in the charge. They signalized themselves under William the Conqueror and under Ney at Waterloo. They are still the same matchless and incomparable breed.

For Virginia to produce the most excellent specimens of cattle and horses in the world, would be a joy to every one of her children. For our quiet and unpretending citizen to show the possibilities of perfection that may actually be accomplished on Virginia soil and in Virginia climate, is to do a great and lasting public good, and has entitled him to the gratitude of every Virginian. What man has done, man may do. All may now aim to reach the unique standard established.

These animals are not to be exhibited and are not advertised. Their owner cares nothing for fame.

Persons seeing these animals have feared to make statements concerning them, lest their veracity should be called in question. But the truth cannot be concealed, and will add another page to the record of the wonderful products of the favored land of Virginia, where earth and sea and sky have combined to bless.

EYE-WITNESS.

Albemarle, Va.

CHESS ONCE MORE.

Editor of the Southern Planter :—In your September number I notice an article under the head of “Chess Again,” by Mr. W. B. Pettit, of Palmyra. After alluding to a piece under the same heading by Col. Harrison, in which he says the Colonel almost (and I think *altogether* and properly too) comes to the conclusion that “like produces like,” and wheat and oats do *not* degenerate into chess or cheat—especially when they are *strictly* watched, he argues in this way, and comes to a logical conclusion that oats do undergo that wonderful metamorphosis and degenerate into chess or cheat. In the Fall of 1881 he seeded a field in oats; in the Spring of 1882 the luxuriant crop upon it proved

at heading time to be chess, instead of oats. Oats were sown upon the land, and in the Spring the oats were gone and chess took their place—*ergo*, the oats changed into chess. Or else, he very naively asks, what became of the oats. By parity of reasoning, and by deduction equally logical and legitimate, I can show that *turnips* degenerate into chess. During the Fall of 1881 I seeded a lot of turnips; it was fertilized by a commercial fertilizer, and no stable or farm-pen manure by which seed of any kind could be conveyed to the land, and it had never at any time been cultivated in small grain of any sort. The turnips chanced to be of a Summer variety, growing superficially upon the land, and in the Spring of 1882 the turnips were gone and upon the lot the most luxuriant crop of chess I ever saw—so much so, that I was tempted to have a stack of some 1200 pounds cut for hay; which, by the by, was perhaps a little better than wheat-straw, but a little *worse* than any other hay I ever saw.

The lot was seeded to turnips in the Fall. In the Spring it was occupied by an abundant crop of chess. Now I ask, with my friend from Palmyra, “if the turnips did not degenerate into chess, what became of the turnips? I will answer the queries in regard to both, by saying that the occupants of the soil being “killed out” by the intense cold and blighting frosts of Winter, created that “vacuum” which “Nature abhors,” and in her caprice she chose to fill it with chess or cheat. On an adjoining space, not cultivated for many years, stood a crop of chess equally luxuriant; and on a lot of wheat in close proximity, which was entered at one corner through a set of draw-bars, through which my hands passed to and from another field, while putting up the bars their horses would bite down the wheat, and kept it down over an area of some six or eight paces. At harvest, this little spot where the wheat was dwarfed and belated, had more chess upon it than the whole lot of some three or four acres. Those who believe in this wonderful transmogrification would have said at once, “That wheat has all turned to cheat;” but not so. Upon an accurate measurement and count, I found that a square yard on the spot bitten down, as above stated, contained *one more bunch* of wheat than the same area measured in two places in the central portion of the lot. It is true, it was in a retarded and dwarfed condition, but it was wheat nevertheless; and the intervening spaces—the vacuum which Nature is ever ready to supply—was filled with cheat. But why, Mr. Editor, is it so wonderful and improbable that chess should spring up, under circumstances favorable to its development, like other grasses? Flint says that it was imported into this country as a “valuable forage plant.” He does

not of course allude to its introduction by Wellard under the euphonious and melliferous name of *bromus secalinus*, *bromus racemosus* or *bromus nolis*; and I am rather of the commonplace opinion, that bringing it here was like carrying coals to Newcastle, or like the nurseryman from the — (not the South), who introduced grafts of the “celebrated American prune and dwarf chestnuts,” warranted against the curculio or beetle, which proved to be the common persimmon and chinquepin, with which our fields and lanes already abounded.

Some years ago, one of my plowmen, instead of carrying his plow in the usual way along a farm road that lead to a distant field, ran a furrow parallel with the road. Subsequently, in returning, he ran another furrow parallel with the first; and at a still later period a third furrow was run by the side of the first two. When the season for vegetation was over, and “chill November’s surly blast laid fields and forests low,” there was upon each separate furrow a distinct species of grass—upon one, a luxuriant crop of “bottle grass,” a worthless and diminutive species of “foxtail,” with a fuzzy, seedy head terminating abruptly at the stalk and resembling an inverted porter bottle, or bottle of “Brown Stout” of the olden time, before the advent of codfish aristocracy and the Colorado beetle, “*par nobile fratrum*.” Upon another, a thick set of carrot or scrag weed, which usually fills our fields after wheat harvest; while the third was filled from end to end with “crab” or crop grass, the usual occupant of our cornfields after “laying by” corn. The site of every old blacksmith shop, where for years Vulcan bared his brawny arms and planted his heavy tread, while plying his laborious trade, sends forth a luxuriant crop of old-field mullien, of acknowledged medicinal powers in bronchial irritation. I passed one to-day, where it was blooming in all its glory, six feet above its chalybeated soil. So springs up around every human habitation, though located in the densest forest, the “Jemsen” or Jamestown weed, as does the same—accompanied by its associate lovers of a fertile soil, “careless” and “pusley”—upon the subsoil taken from the deep bosom of the earth, as in digging a well or ice-house, when exposed to the action of the sun, rain, and air—the first (*stramonium*), a medicinal plant of great narcotic power; the other two of acknowledged virtues to fatten hogs—all for the good of man. In the section in which I live—between the tortuous current of the Staunton on the north and the placid waters of La Belle Dan on the south, remote from any original pine forest—the exhausted fields send forth the beautiful long-leaf, long-bodied woods-pine by the side of the scrubby old-field pine, in close proximity and seemingly vieing with each other as to which shall bestow most of its

fertilizing elements to recuperate the wasted soil, for the good of God's rebellious and unthankful creatures!

Several years ago an untimely, killing frost blackened and blighted fields and forests in the Spring, when the buds and half-blown leaves were pendant from every bough. Many were the surmises as to what would be the result. Some thought the forest trees would die from the intense heat of Summer, denuded of their protecting shade, as it was impossible for new buds and leaves to form at that late season. All nature seemed blackened and ruined as if swept over by the withering breath of desolation; but in a few days the fields again put on their vernal robes and the forests were reclad in a mantle of living green! During the next year, I was called to pay a professional visit to a little girl of seven or eight summers, who had a malignant ulceration of the gums, with deep sloughing. In making application of some styptic lotion to prevent gangrenous extention, her *new teeth*, in various stages of development, fell out. Upon one occasion I met her mother at the door; with tears streaming down her cheeks, as she extended her right hand in salutation, she held out her left exhibiting the teeth of her little daughter, and said, "Oh, doctor! my little daughter has lost all of her new teeth. Will she ever have any more?" Said I, "Madam, I confess the case is rather a novel one to me; but be of good cheer and fear not. The same mighty power that last Spring redecked the fields in vernal robes and reclad the forests with a mantle of living green, will provide for your little daughter." And to-day she wears as beautiful a set of natural, pearly teeth as ever adorned the roseate lips of budding womanhood! Than this—than these—than all—is the spontaneous growth of the worthless grass known as chess or cheat more wonderful?

The mighty workings from the *reverse department* of Nature's great storehouse are beyond human ken; and she must be capricious indeed to require the sacrifice of our most valued cereals to produce such a worthless pest as chess or cheat. In short, I am disposed to conclude with Col. Harrison, that wheat and oats do not change into chess or cheat, when they are *closely watched*; and, consequently, am unable to accept the theory of my friend from Palmyra, who seems to have attained the desideratum required by the Colonel, "to settle the question forever." And I could only accept his deductions by calling into requisition his liberality, to allow me to place upon the catalogue of "things that change" *my turnips* alongside *his oats*, for the result in both instances was attained by a similar train of argument, based upon the same facts. But, serioasly, to admit this metamorphosis would be

to violate and set aside the laws of Nature, which, according to the definition of Lord Bacon, would be a miracle, and the days for miracles are past. So, should it really take place, know you that he who formed the heavens and the earth; he who made the glorious orb of day and guards its diurnal course; he who placed the Queen of Night in mid-space and surrounded her with a galaxy of eternal and unfading glory, will have lost his grasp of the helm of the universe and a new edict gone forth, that "whatsoever man soweth, that shall he *not* reap!" As to the transmogrification of wheat into darnel or spelt, the "*colinum temulentum*" of the books, which at one time was a great pest in our wheat fields: I have seen it but *once* in my wheat or elsewhere for the last five or ten years. This was a solitary stalk, well headed, in the midst of a wheat lot, which, "last of the Mohegans," I sacrificed with my penknife, and, I trust, exterminated from the face of the earth, for since then "wheat no longer masquerades under that disguise."

And now, Mr. Editor, a single word on "smut," which, while not germane to the subject, may be considered as at least collateral, and possibly of some interest. The subject is suggested by an incidental sentence in Col. Harrison's article in your August number. He says he knew a farmer who had been successful, &c., "yet held opinions that you and I would consider heretical, as that *smut* in wheat could not reproduce itself." Surely the Colonel does not mean that the offensive, black, impalpable dust which constitutes a grain of smut, could reproduce itself or a *germ* of any kind! I would as soon expect a "pinch" from that fungus of the fields, which, when matured, encases a fine, black powder or dust, to which the boys have appended the *sobriquet* of the "Devil's Snuff-box"—though I do not know that that gentleman ever regaled the cavities of his proboscis with that delectable compound to awaken the dormant sensibilities of his olfactory organs or not—to reproduce itself in the form of a *wagon load* of snuff-boxes, ready "cut and dried," for the use of His Satanic Majesty, as that a grain of the offensive black mass known as "smut" could reproduce itself or germinate in any way; while it is true, that where smut "abounds" the grains of wheat in that peculiar state which generates smut grains may "still more abound." But as to that fact, this dependent (not knowing) saith not.

I will mention a single fact, in conclusion, and leave the subject without comment. Some years ago I seeded an eight-acre lot in a beautiful new variety of clean, perfect wheat. The lot was all sown and plowed in, quite dry, except a peck, which was not plowed in at the time on account of a hasty, heavy rain, and was not gotten in for

some six days after, and then in a heavy, clammy soil. The crop harvested was simply magnificent; the yield, 43 bushels for every one seeded; every golden head was bowed, as if in humble recognition of the abundance of the Divine Giver. As the cradles passed around, the entire field was girdled with a belt of royal purple, and seemed as though the bow of heaven had descended and settled there to deck and do it honor, except the peck sowed before and plowed in after the heavy rain. That was *green* and unpromising, and when harvested, six days after, proved to be smut—smut—nothing but smut, with an occasional dwarfed head of shriveled wheat.

Now, Mr. Editor, waiving the common vulgarism of "How is that for high?" I ask you "How is that for smut?"

I seated myself to write a single page, but I see from the numbers that, "calamo currente," I have unwittingly jotted down a half score but I hold you under no obligation whatever. Should your patience succumb in the perusal of the manuscript, I shall not be at all aggrieved. And should you wade through that, and deem it unworthy of a place in your valuable journal, which is dispensing so many good "things" amongst the people, I will still acquiesce and say, "All right."

And now, lest a thought should intrude and cause me to tax you still more heavily, I bid you a hasty "good night."

H. S. BELT, M. D.

Whitmell, Pittsylvania Co., Va.

DUTIES AND LIABILITIES OF FARM HANDS.

"Lex," a writer in the New York "Tribune," says: "When a *farm hand* hires for a stated time he is bound to do all necessary work on all occasions, Sundays and legal holidays included. There is no stated length of time which constitutes a day's work on a farm. This is established by custom, and is usually considered to include feeding the stock and doing chores before seven in the morning and after six in the evening, so that the day may be spent in the field work. A man who receives pay and board on holidays, as well as other days, should do his reasonable work on those days; otherwise it would be quite as reasonable for his employer to say. 'This, is a holiday, and we do not work in the house and no meal's will be prepared for you.' It is better to have all these points settled when the man is hired and made part of the agreement, and so avoid all chance of dispute. A farm hand cannot claim extra pay for overwork unless there is a special agreement, as extra time in harvest or haying or other emergencies go to offset the loss of time by bad weather. Nevertheless, an employer can well afford to be liberal in this respect when work pushes."

ADDRESS BEFORE THE NATIONAL FARMERS' CONGRESS,

BY ROBERT BEVERLEY, OF VIRGINIA, PRESIDENT,

*At its Annual Session, at Nashville, Tenn., Nov. 19th, 1884.**Gentlemen and Delegates to the**Farmers' Congress of the United States:*

I congratulate you upon the increased interest everywhere manifested by intelligent agriculturists in the general policy of our State and National Governments in its broad relations to their great calling. It is a truism to be sure, but let us re-affirm it, that agriculture is the greatest and most important of the industries of this great people. Why, therefore, we demand to know, is its claims to the first consideration, or to any consideration at the hands of legislators or magistrates, habitually put aside, persistently forgotten, or contemptuously ignored? Not yet do politicians and statesmen appear to comprehend that even in a purely intellectual and scientific point of view agriculture has within two decades rapidly come forward to the foremost rank among learned professions. It has ever been the noblest and purest, the most peaceful and dignified of human pursuits, and in this day of profession, prodigality and corruption, it shines forth more pre-eminent in all these respects than ever before. When we say that we mean to be heard with attention and respect by our representatives who hold their seats by our suffrages, let it be plainly understood we mean all we say. If it be made necessary, we stand prepared to carry the great questions vital to our interests before the people, to be by them decided in every congressional and assembly district in the United States. If it be made necessary, our candidates will be found opposing those of both parties and all parties, for we mean to have our rights. We will neither enter upon any agitation of ordinary political questions, nor embark in any political or social crusade. We make no war on any of the great industries of the people, neither upon manufacturers, nor mining, nor transportation, nor commerce, nor any pursuit or employment by which honest people earn their bread. God forbid! When the farmer meets the mechanic he will take him by the hand and hail him as a brother. Shoulder to shoulder let them take up their stand in defence of their common rights, against burdensome and unjust taxation, against monopoly and oppression in every form—.

“ Each in his place let each revere,
And while we march in freedom's van
Scorn the lewd rout that dogs the rear.”

Whatever hurtfully touches any of the great employments of the bread armies of the land injures and hinders each and all. I say, therefore, we contemplate no third party movement, no revolutionary or agrarian proceedings. The empire we seek is peace. We ask of our representative men simple, business-like methods in the administration of public affairs; a statesmanship that will cover every industry and conserve every right; manly, straightforward, and open and honest in all its methods.

No longer will we submit to be told by our representatives and servants, our creatures whom we have made, that we know not what we want. Rights we have under the Constitution which the government is bound to respect, and *we* know them. Of these rights we do not intend to be defeated by our servants, as too long we have been. The end of that sort of thing, long delayed, at length has come. We seek nothing as a right contrary to the true meaning and intent of the organic law, but should that law be found in conflict with the necessities of the people, the Constitution itself must be so changed as to bring it into harmony with the spirit of the age in which we live. For that very purpose its framers in their wisdom have provided peaceful means.

Speaking from the high place to which your partiality has called me; speaking as President of this national body of representative farmers; speaking, therefore, in the name and in behalf of the farmers of America, yes, and in the name of the mechanics of the United States, it now becomes my duty to pass in review some of the great measures we have submitted to the National Legislature, and to show as briefly as I am able how they have been received, and what is their present status. As your executive officer, referring to my address to the farmers of the United States, of December 18th, 1883, which I felt called upon to issue, and which is herewith submitted for your sanction, first, I beg your attention to the fate of the bill for the extension of the benefits of the Signal Service to agriculture and the rural population generally, comprising in the aggregate, perhaps, three-fourths of all the people of the nation.

The committee of this body, of which I had the honor to be chairman, charged by you with the duty of pressing this measure upon the attention of Congress, met in Washington. After conference with the chief signal officer of the government, we addressed to him a memorial embodying the views and wishes of the National Farmers' Congress as understood by your committee.

This memorial, with his estimate of the cost of the service, General Hazen forwarded with his approval to Congress, and asked for the pas-

sage of a bill to carry the proposed measure into effect. Thus presented and endorsed, our memorial, together with a bill to effectuate our object, drawn by the Hon. Mr. Cardwell, of Tennessee, was referred by the House of Representatives to its Committee on Agriculture. That committee, after courteously hearing arguments by the patrons of the bill, unanimously passed it through their committee and forwarded it with their endorsement to the Committee on Appropriations, asking that it be made a part of the Sundry Civil Bill, through which all appropriations are made for the support of the Signal Service. The sum asked for by General Hazen to support the service we desired to put in operation was the comparatively small one of \$250,000. As chairman of your committee, in pursuance of your instructions, I advocated this most important measure, and in company with my colleagues secured its passage by the House Committee on Agriculture. Therefore I addressed a letter in my official capacity to the Hon. Samuel J. Randall, chairman of the Committee on Appropriations, begging of him and of his Honorable Committee their careful and favorable attention to the measure. The Honorable Chairman took no notice of my letter, and the Honorable Committee took no notice of the bill. Thus was this most important measure, worth, in my humble judgment, fifty million dollars annually to the agriculture of the country and to the taxable values of the nation, endorsed and presented as I have stated, deliberately strangled in cold blood. It seems to have been calculated that the stupidity of the agricultural class is dense, and their patience boundless. It remains for us to teach those who may be of that way of thinking to know better. Such was the reception and such the fate of our most favored measure. The sum and substance of our report is dead in a pigeon-hole, strangled by the Committee on Appropriations. It remains for us now to inform the honorable gentlemen we have not done with this measure, but that we mean to carry it.

Now, let us examine into the history of the Pleuro-Pneumonia Bill. It passed indeed and became a law, but so altered and emasculated for political reasons and purposes, which are no secret, that in its final form it has proven inefficient, and now it is certain that fearfully insidious plague has invaded the great Northwest. Cattle men, with bated breath, are now awaiting in anxious hope and trembling fear the result of the prompt and skillful and untiring efforts to check its progress by that able and valuable officer of the National Department of Agriculture, Dr. D. E. Salmon, whom I desire personally and officially to commend for the intelligence and vigor of his conduct under difficulties and embarrassments many and great. The persons in both branches

of Congress who throw obstacles in the way of the passage of an effective measure, session after session, are well known to the people of the country. There is a mark of public indignation upon these men, and if it shall be that this plague has taken permanent root in the heart of the great cattle-producing region, they will be driven forth, pursued by obloquy and wrath whithersoever they shall turn. This is the calamity long foretold by the ablest agricultural writers; the extent of it no man is now able to foresee, nor to foretell how disastrously it may come to re-act upon the business of the entire country.

Another proposition was urged upon Congress through the chairman of your committee, viz.: The elevation of the Department of Agriculture and the creation of a Minister of Agriculture at its head. That proposition had been endorsed by nearly every agricultural body or assembly throughout the country. It had received the unanimous support of the agricultural press and agricultural speakers and writers everywhere. It was received with laughter and sneers. "What use," said some of them, "has agriculture for a Cabinet Minister? The thing is absurd, preposterous, ridiculous." Instead of this idea being preposterous and ridiculous, it is merely borrowed from the practice of other agricultural nations, among the most enlightened and progressive of modern times. We are not to be silenced by the dictum of constitutional expounders who tell us "the word agriculture is not to be found in the Constitution." We understand the theory of our government and the spirit of our Constitution far better than these learned gentlemen give us credit for. We will not slavishly bow down to whatever political Fetish is held up for our worship. We know full well this is not a constitutional question at all, but merely a question of expediency, standing on precisely the same footing as the establishment of the Department of the Interior, the Postoffice Department, or the Department of Justice stood. As a question of expediency and wisdom, we who are a clear majority of the voters of the Union choose to decide for ourselves that we will have a Minister of Agriculture, and if our servants and representatives refuse to obey our mandate we will choose in their stead others who shall be pledged to carry into effect the things we have determined. The truth is, the farmers of this country have so long been regarded as political mud-sills, and I fear have so long accepted the position assigned us, that politicians will not yet credit us with the possession of patriotism and information and brains. I believe the time has now come when it is our duty and determination to change all that. Gentlemen, I affirm that Congress could not be brought, and as at present constituted, I believe can never be brought,

to give serious and statesmanlike consideration to any measure originating with the agricultural class, however important to the welfare of the nation. It is supremely necessary for us to take a dispassionate and business-like view of the situation. It is my conviction that we should firmly insist upon the creation of a Department of Agriculture, whose chief shall be a constitutional adviser of the President, equal in dignity, influence and power with every other officer of the Cabinet. In that way, and in that way only, as I believe, that is to say, by and through our Cabinet Minister can we hope or expect to gain for such measures as may be vitally important to our interests that wise and respectful consideration which the welfare of all the people demands. Does not every man well know that extensive disaster cannot befall the greatest and most essential of the industries of the nation without the evil consequences being felt by all the people. Such disasters to our business fall inevitably with cruel and crushing effect upon the poor of every class throughout the entire land. Let us all stand together to protect the poor and honest laboring man, and especially laboring women, who bear far the greatest burden of the family. We may safely leave the well-to-do and the rich to defend themselves. In the name of our common humanity, why do our representatives refuse or fail to do whatever may be lawfully and safely done to protect and defend the greatest of all great industries, the nursing mother of science and arts, the source of all national greatness and progress, splendor and power, the foundation of all sure and permanent wealth.

We must learn to realize that the virginity of the soil of this vast and magnificent country is already despoiled and deflowered, much of its fertility is already wasted and destroyed, yet nothing is done by this *unrepresentative* government, to stay the destroyer's hand, nor to rescue the national domain from the plunderer, nothing done to enforce or encourage the restoration of the waste places. To all this our legislators and would-be masters have one scornful reply, viz., "the word agriculture is not to be found in the Constitution." It must stand alone and unprotected, help itself as best it may. Thousands and thousands of acres once fertile and productive, are to-day grown up in brush and pines, the habitation of foxes and wolves, and armies of our agricultural laborers are forced westward, westward, westward, seeking new empires to destroy. I'm old enough to remember when Ohio's average wheat crop was thirty bushels per acre; now barely twelve. If this utter indifference of the National Government to the progressive spoliation of the national domain be not arrested, another generation will see a teaming and hungry population struggling for ex-

istence on a soil depleted and impoverished. But a Constitution, strictly construed, framed to meet the wants and necessities of three millions of people must be made by constitutional expounders to fit the wants and necessities of one hundred millions without alteration or growth or amendment!!

Gentlemen of the National Farmers' Congress, farmers of America, we must fully realize, we must always remember, that great results are to be accomplished only by great and persistent efforts. We must prepare, if again rejected or mutilated, to appeal them to the people. We must resolve to continue calm, determined, persistent agitation until our great purposes are accomplished. We must again press upon Congress our measures by them rejected or mutilated at their last session. We must bring them forward in the congressional districts, and in the senatorial contests before the Legislatures, and we must cause it to be believed that we have resolved to fight it out on that line if it takes the balance of this century.

Gentlemen, there are several other points of great interest connected intimately with the wants of agriculture, of a national character, that I might discuss in this address to you, but I fear to weary you. I will only mention them, and they may be brought up as subjects of discussion in this representative body—viz., experimental stations, fostered by the government in connection with our agricultural colleges; 2d, inter-State transportation, as bearing upon agriculture; and, 3d, the increased facilities of education to the agricultural classes. The latter, however, in my humble opinion, should be left to the several States, or at least entirely under their control.

In conclusion, let me say it is far from my purpose to discuss the political issues of the day; yet, I must refer, before I conclude, to certain relations of Federal taxation to our great farming industries. It is surely known to all that the legislation of Congress upon this subject has been always either openly hostile to certain great products of agriculture, or has wholly failed to foster or encourage any of them by any decisive or adequate measures. The burdens have been thrown upon the honest toilers of agriculture and mechanics, while the millionaire and the monopolist have not borne their just proportion. Of this fact there can be no possible dispute; all men know it. They know, too, that in the National Treasury a vast surplus is collected, a monstrous *corruption* fund, which constantly threatens calamity to the country through dangerous corruption and collusion of the public servants employed in the administration of the government. In the meantime an odious, onerous and wicked tax is left upon certain great products

of agriculture. A tax not necessary for revenue, and only serving to pay an army of officials, corrupt and corrupting, and helping to swell that dangerous surplus in the treasury. And what, my friends, does that surplus represent? Does it not represent the agony and sweat of millions of men and women, toiling, toiling, toiling hopelessly, and millions of hungry children crying helplessly for bread!

It is my best judgment as a business man, that it is to the last degree impolitic and unwise to maintain two systems of Federal taxation, when it is demonstrated that one is more than sufficient for the government on a liberal foundation, as becomes a great and progressive people. A niggardly parsimony of expenditure, falsely styled honest economy, I loath and despise, for I know it to be one of the lowest frauds of the political hypocrite. I believe that the remnants of the internal revenue system (that most corrupt and vile political machine) which rests almost wholly upon agricultural products, should be entirely and promptly abolished. Let the Federal tax be gathered—first, for the revenues of the government; second, in the interests of the great productive industries of the land; third, let it bear upon capital rather than labor. Let it wrongfully oppress no class nor condition of men; nevertheless, take due heed that it shall bear ever lightly upon the poor. Surely, we must believe there is wisdom in the country sufficient for this if the desire and honest purpose exists.

Farmers and mechanics, laborers and producers of every class, we are brothers in a common cause, let us stand together as one man against corruption and oppression in whatever form they come, by whatever name they may be called, whatever disguise they may assume. Organize, I beg you organize, to resist further aggressions; without organization you cannot stand before the trained and desperate legions of corruption. My brothers of the plow, by right, by Divine authority, the post of honor is yours. In this great conflict you must take the lead. Organize, equip for the onset, or else the hosts of monopoly and corruption will trample you in the dust beneath their feet, and the great cause will be lost.

THE idea that hogs not fattening are injured by high feeding is a great mistake, and is not nearly as prevalent as formerly. In this country the idea originates in the fact that Indian corn, or corn-meal, is not good food alone to keep any stock in growing condition. A mixture of oats and barley makes excellent food for growing pigs, making them long and thrifty rather than round.

COMMERCIAL FERTILIZERS v. FARM MANURES.

Mr. Editor,—Several good pieces have been in the *Planter* of late on this subject; but, with your permission, I would be pleased to say a few words.

I think every farmer should make every pound of manure on his farm he can. Weeds, corn-stalks, and scrapings from the woods should be used. Stables, cattle-stalls, and hog-pens should be kept well littered from one end of the year to the other. Hen houses should be cleaned at regular periods; wood ashes and bones should be collected and used. Manure of this kind will show wherever it is used; but we cannot raise enough of either to make a farm of any size rich, no matter how careful we are. We must use fertilizers, and I do not believe in, nor do I advise farmers to use, many of the fertilizers of the present day; but I advise them to use natural manures, that have been on the market for years, and have been tested and found to be what it is represented to be, such as pure raw bone, fish guano, South Carolina floats, Orchilla guano, and many others I could name. Use them moderately, or as you are able to pay for them, and use such as you find suits your soil; and if on account of a bad season your crop should fail, don't get discouraged and say the guano is no manner of account, but try again.

In looking around in my neighborhood, I see that the men that have used natural manures, with all the home manure they can make, have rich farms and make good crops and are independent, while those that depend on what home manure they make have an acre or two of good land, while the greater portion of their farm grows poorer and poorer every year, and they are discouraged, in debt, and don't think farming pays.

A FARMER.

Westmoreland Co., Va.

FRUIT-RAISING IN VIRGINIA.

Editor Southern Planter,—Before coming to Virginia I had read much about the abundance and variety of fruits in your State. I expected to find fine orchards on all your old plantations, and a choice selection of fruit in every village garden. I came—I saw—not large, thrifty orchards in full bearing, but, on a great many plantations in Southwestern Virginia, I found a few antiquated, sorry, discouraged apple and peach-trees scattered here and there around, and near the houses and outbuildings, looking as though they had the worst of it in their years of struggle with the great, thrifty weeds that were choking out

their growth and life and robbing them of nearly all the sustenance which the impoverished soil could supply. On the peach-trees (it being a bearing year, 1883) could be seen considerable fruit of a very inferior quality. The apple-trees, many of them, looked as though they had been struggling through half a century, with very little thought, or care, or culture. The little fruit they produced was small, knotty, and worthless for marketing. I have seen in your State, not only one, but hundreds of orchards like these. I have learned that hundreds and thousands of barrels of Northern apples are sold in this city. I had heard much about your fine peaches and plums and apricots and nectarines and figs and grapes, and I fancied that the State to which I was coming to find a home, was a paradise for the lovers of fine fruit. I had lived for years in some of the cities of the Northwest—the thought of whose cold, long winters makes one shiver—and I and my family had often found fruits a luxury; yet, I must say that St. Paul and Minneapolis are far better fruit markets than Richmond, and prices are sometimes lower there than they now are here. But all this argues nothing in the light of what I have since seen in your State. I saw, recently, at the fair at Scottsville, as fine specimens of apples—raised in this dry season—as I have ever seen in any State of the Union. I saw *better* specimens of winesaps than any I have ever seen in any State or Canada; and here let me say, I am glad to see the favorable notice your correspondent, Mr. Christian, gives us in the last issue of the *Planter* of this excellent apple. I have seen here in your State peaches, plums, cherries, pears, strawberries, and blackberries equal to any I have seen elsewhere. In fact, I have seen enough to satisfy me that my previously conceived impressions regarding Virginia's capabilities as a fruit-growing State were correct. You have a diversity of soil, climate, and other conditions that are favorable. You have your table lands, your Piedmont, and your mountain ranges. You can select your southern slopes for one kind of fruit, and your northern for another. You can choose such altitudes as you prefer. Nature has done for your State, in this respect, all that you can ask. But nature will not plow and harrow and fertilize your lands, nor select and buy and plant your nursery stock and your vines. Nor will she dig around and cultivate and prune your trees and your vines. She will not dig the borers from the roots of your trees, or place ashes and lime around them, or scrape off the moss and rough bark, or wash their trunks with soapsuds.

In your last issue, you and some of your correspondents grapple with the whole problem. Dakota can produce millions of bushels of

wheat, but no fruit; Minnesota can raise thirty to forty millions bushels of wheat; Dakota can never produce fruit because of her rigorous climate; Minnesota does not raise ten per cent. of the fruit consumed in the State. None of the Northwestern States can cultivate fruit to any extent successfully. Missouri produces apples, but they are inferior in quality. Kansas raises fine peaches, but she is too far from the great markets. Michigan and Ohio produce apples of fine quality, and the former has been noted for her peaches as well as Western New York for its apples. I have recently visited the peach-growing region of Michigan, lying along the shores of Lake Michigan. The crop is failing entirely in some localities there. A few years ago St. Joseph and Benton Harbor shipped vast quantities of peaches annually. I do not believe they ship any now. The trees are dead.

The simple fact exists, that those States are not favorably situated geographically. In many large districts in the Northern States where, thirty years ago, fruit-raising was an important industry, farmers are now obtaining their supply from more favored localities. Sudden and violent changes of temperature in the Northern States make fruit-culture a very uncertain and unreliable industry. These conditions will always exist there. Why do the people of Virginia give so little attention to this important and profitable industry? Why do we see hundreds of plantations, containing five hundred to two thousand acres, with only a few score of stunted, unproductive fruit trees? If I found such in the North where the conditions were as favorable as they are here, I should at once infer that such Northern people were indolent and unthrifty. I am glad to be able to say, however, that in Virginia you have some notable exceptions to this general rule. And the very fact that some of your fruit-growers have met with such wonderful success, and furnished such convincing evidence of the capabilities of your soil and climate for fruit culture, adds to the force and pertinency of the question I have propounded.

Now, it is not the design of this article to instruct your people in fruit culture. It is to give an expression to my great surprise that they show so little appreciation of the wonderful advantages they possess.

Respectfully yours, J. R. JACKSON,
Immigration Agent, Richmond and Alleghany R. R.

THERE is a great advantage in subsoil plowing for wheat. The colder and poorer subsoil is not turned up for a seed bed, nor do the wheat roots penetrate it deeply in the Fall. But next Spring and Summer this loosened subsoil is a reservoir for water, giving it out as most needed to perfect the head and grain.

THE EXHIBITS OF DR. WOODS AT THE STATE FAIR.

HOLKHAM, NEAR IVY DEPOT,
Albemarle county, Va., October 30th, 1884.

My Dear Sir,—You requested me to give you a statement of my entries for exhibition at the State Fair, and I intended doing so before leaving Richmond, but being somewhat tired at night I failed to carry out my promise.

I exhibited fourteen Shropshiredown sheep—four ewes over two years old, three yearlings, three buck lambs, three ewe lambs, and one yearling buck; this last by an imported buck and from an imported ewe. None of my sheep were highly fed for exhibition, hence I took only two premiums—viz., on my buck and ewe lambs. Jonas Webb, the great breeder of Southdowns at Braham, England, said that he could not afford to exhibit ewes, because to feed them up to take prizes ruined them for breeding, and I concur with him in this opinion. The judges to award prizes should know the points of excellence of the different breeds of sheep, and award prizes accordingly. All that are forced up by high feeding to extra size and condition, should be exhibited as fat sheep. It is now well known that sheep, especially ewes which have been forced up to great size by high feeding for exhibition, are sold at prices far below what they were formerly. A pen of ewes which took a premium, contained one which was evidently not of pure blood, though a good sheep. Had the committee been well acquainted with the points of different breeds, they would have rejected this ewe. The exhibitor, no doubt, supposed the ewe to be pure-blood Shropshire, as I do not know a more perfect gentleman in our State, and he would not, under any circumstances, make an improper entry knowingly.

During my long life, now approaching three-score and ten, the age allotted to man, I have tried several different breeds of sheep, but have found that the Shropshiredowns suit our soil and climate better than any I have tried. If twenty years younger I would make a breed, by crossing and selecting, which would be the sheep for this region, both for the fleece and for the butcher. To have good health in our changeable climate during the Fall and Spring, a close fleece is absolutely necessary. The Merino or Shropshire crossed with them, would be a good basis to begin with. Our Society is guilty of a great error in awarding only one premium to sheep. The rearing of sheep needs encouragement more than any other variety of stock, being better suited to our worn and depleted soil than any other.

A committee should be appointed to examine all hogs, cows and heifers, and ewes, and when found too fat and damaged for breeding purposes, to have them exhibited as fat stock.

I exhibited one yearling ham (baked) and one older ditto (boiled), which last took first prize. The first-named was equally as good, but unfortunately was not cooked quite long enough, my cook not understanding baking as well as boiling hams. The hogs furnishing the hams were three-fourths Berkshire and one-fourth Poland-China. One-half Berkshire and one-half Poland-China makes the best hog for all purposes I have seen tried, and I have tested a great variety of breeds and crosses. No one can have a No. 1 ham or bacon without having the right sort of a hog, perfectly fattened. I give my hogs, when fattening especially, an abundance of charcoal, burning coal-kilns for the purpose; also give them salt and ashes, mixed—occasionally a little sulphur added. This treatment makes all of the organs of the interior entirely sound and healthy; hence the flesh will be greatly superior to that of hogs fattened in the usual careless mode; and when corn is the principal food, it is better worth 60 cents per bushel than twenty or twenty-five fed in the usual mode.

I exhibited also a sack of corn, which I have made by crossing and selecting remarkably prolific, and will stand more drought than any variety I have ever seen. The committee were much pleased with it; but having a slightly yellow color, did not consider it white enough to take a prize for white corn. The corn which gave it the quality of standing drought came from North Carolina and was somewhat yellow.

This is quite a long but hurriedly-written letter, and I must beg that you will excuse it. Truly yours, JOHN R. Woods.

Prof. B. Puryear, Richmond City, Va.

P. S.—I have just read this to a lady. She thinks it should be published, so show it to my good friend, Col. Knight. Perhaps he may think it worthy of publication in the *Planter*.

THE NORTH v. THE SOUTH AS A FIELD OF EMIGRATION.

Editor Southern Planter,—I received your October number with thanks. I take a good deal of interest in it, as I intend, as soon as circumstances will permit me, of visiting the South, with a view of getting parties here to emigrate there. People here, in general, know but little of the South—that is, what was the slave States. They fancy the land is poor, and that the country is unhealthy; while the North have their agents in every direction, with their maps, singing the praises of the far Northwest.

I beg to make a few remarks as to Canada, more particularly the Province of Ontario. Ontario is a rich Province, possesses good land, and as good farmers as are in the world; but land is dear here. Wild

land is from \$10 to \$25 per acre; improved farms, from \$30 to \$100 per acre. Our seasons are short; we frequently have frosts in May and June, often doing a great deal of damage. Still, we raise abundant crops by good farming.

The Northwest Territory and Manitoba offer good terms to settlers—160 acres as homestead and 160 acres as pre-emption, at a low price. No doubt there are millions of acres of good land and good chances for settlers there, but there are great drawbacks. They have severe cold winters; there is a great scarcity of timber for fuel and for building purposes. In a cold country this must be severely felt. There they can put their eggs into one basket. Their principal products are Spring wheat, barley, oats, and roots. Then they are a long distance from the seaboard. As an agricultural country, which it will be, grain must rule low in price, from the great length of transportation, which will be expensive. As to the Northwestern United States there are the same objections.

Now, with regard to the Southern States—such as the States of Virginia, the Carolinas, Tennessee, and Mississippi—for the last two years I have tried to inform myself with the true character of those States, as to their adaptability for agriculture. I have had many sources of information from parties who left here and settled in the South, and from printed matter I have received from the agents of the Bureau of Immigration in Richmond, Va., and Jackson, Miss., Norfolk, Va., and from many correspondents in the South. The *Southern Planter* gives practical and useful information, is well edited, and has many excellent articles in it, and will compare favorably with any agricultural paper published in Canada.

Now I beg to say, from all the sources of information I have received, I am fully convinced the South possesses the best field in America for farming, mining, and lumbering. From its congenial climate, its large rivers, its proximity to the sea-coast, its access to the best markets in the world, and the great variety of products that can be raised, it must soon develop itself; cheap lands must induce settlers.

But many say here, How is it land is so cheap in an old settled country? They say the land must be poor; the country is unhealthy. They little know the dreadful destruction the war made, nor the great change in social society by the breaking up of slavery, and the thousands of rich planters that have been ruined and their plantations left in ruins.

Now, I see by the *Planter* you are raising good crops of wheat in Virginia, which will be a great inducement to Northern men.

In conclusion, will beg to say the South has a bright future before her, and I trust I will yet see a happy colony from this locality settled among you. I have a son who has been settled in Memphis, Tenn., eighteen years; he is president of the Howard Society. He says he has had the greatest of kindness extended to him. He now holds a high position as a wholesale hardware merchant.

Yours respectfully, MILES LANGSTIFF.

Wallaceburg, Ontario, Canada.

PLAIN TALK ABOUT PLEURO-PNEUMONIA.

Because fresh outbreaks of pleuro-pneumonia are not reported every day, and the carcasses of dead cattle lining the roadsides throughout the country, a certain class of people and the journals in their interest are pretending to doubt its existence, and deny that the recent outbreaks were of this contagious and dangerous disease. But for the prompt manner in which Dr. Salmon, chief of the Bureau of Animal Industry, backed by our own State authorities, took these outbreaks in hand and instituted measures for their suppression, the disease would probably be spreading fast enough to satisfy the continual demand of these parties for fresh evidence and new facts. It looks at the present writing as if the machinery now at work (largely through individual effort and by money voluntarily contributed by the 'stock-owners') would be able in the course of a few months to stamp out the disease in the west, and to remove this great menace to the safety of the live-stock interest, without permitting any single department or branch of it to sustain any serious inconvenience or embarrassment. The official veterinarians have occupied a very delicate and responsible position. If by making investigations and warning the public against the points of danger they stamped out the disease, these people were ready to take advantage of its disappearance to declare that the disease never existed, and if it escaped control and invaded the channels of commerce, the same men were ready to denounce them as inefficient. So far as these men are concerned, no action the authorities could take, or even their inaction, could save them from their detraction. But what were they to do? Could they permit this dangerous disease to spread among the cattle of the country until every man in this broad land could from his window satisfy himself of its existence? Should masters assume such proportions as these before anything could be done to arrest its progress? It seems as if certain persons thought so, but if we mistake not the great body of stock-growers think very differently. As to the contagious character of the disease, that was abundantly shown by the most incontestable of evidence. In fact it was its contagious character which first attracted attention to it in this State. *It was known to be contagious by the owners of the infected herds before anything else was known about it.* Was Dr. Salmon and our State authorities authorized to proceed on their own judgment, based upon careful investigation, scientific and otherwise? Or should they wait until everybody else, through the spread of the disease, had equal opportunities for such investigation.—*Breeders' Gazette.*

CHESS OR CHEAT.

Editor Southern Planter,—I have observed with much interest the discussion going on in the columns of the *Planter* between the advocates, *pro* and *con*, of the degeneracy of grain into cheat. My own views have coincided with those of the editor, and others who have advocated the degeneracy theory.

In conversation recently with a very intelligent and practical farmer and a gentleman of undoubted veracity, the Rev. Robert T. Henley, of King and Queen county, he cited two cases which go further to establish the latter theory than anything I have seen.

He stated that his brother, Dr. Henley, of King and Queen, found in his wheat field a head of grain which was *one half wheat* and the *other half cheat*. This he saw. How will Prof. Page's scientists explain this? Either wheat grew the wheat and cheat, or else cheat grew both.

Mr. H. mentioned another case going to establish the degeneracy theory. Traveling in Ohio some years since, he was shown by a friend a beautiful timothy meadow, which he was told by the owner was a fine crop the first year, free from any mixture of other grasses; but that after the crop was harvested, it was grazed very closely. The next year a great deal of cheat grew up with it; it was harvested but not grazed during that Summer, and the following year he saw it; it was free from cheat and produced another fine crop of grass.

A. H. J.

ENSILAGE FOR SILK-WORMS.

Editor Southern Planter,—I make the following extract from "Science in Short Chapters," by W. Matthine Williams, F. R. A. S., F. C. S., thinking it may interest your readers:

"We are told that very inferior material (such as coarse maize grass mixed with chaff), when thus preserved, gives better feeding and milking results than good English hay.

"I may mention a very humble experience of my own that bears upon this. When a boy I was devoted to silk-worms, and my small supply of pocket money was overtaxed in the purchase of exorbitantly small pennyworth of mulberry leaves at Covent Garden. But a friend in the country had a mulberry-tree, and at rather long intervals I obtained large supplies, which, in spite of all my careful wrapping in damp cloths, became rotten in about ten days. I finally tried digging a hole and burying them. They remained fresh and green until all my silk-worms commenced the working and fasting stage of their existence. This was ensilage on a small scale."

Yours truly,

Cartersville, October 7th, 1884.

T. L. P. COCKE.

THE WORLD'S INDUSTRIAL AND COTTON CENTENNIAL EXPOSITION, DEPARTMENT OF INFORMATION AND ACCOMMODATION.

We beg to inform you that there need be no anxiety as to finding comfortable quarters for yourself and party in New Orleans, any time during the six months of the World's Industrial and Cotton Exposition.

The Board of Management has organized this department for the express purpose of aiding all visitors to the Exposition, not only in securing suitable accommodations at moderate rates, but in protecting them in every possible way from excessive charges, and this service we render free of cost. The rates will vary according to location and style of entertainment, as follows:

Furnished rooms will be from 75 cents per day and \$15 per month, up to including \$1.50 per day, and \$30 to \$40 per month.

Board and lodging will be double the above, or \$1.50 per day and \$30 per month, to \$3 per day and \$50 to \$75 per month.

These rates will prevail during the entire period of the Exposition, and we are assured that there will be no lack of comfortable accommodations at these prices.

In addition to the above, our best hotels will not advance their rates; the "St. Charles" will charge the usual \$4.00 per day, while the new "Hotel Royal" will be conducted on the European plan, rooms from \$1.00 per day, up to the choicest apartments, at \$8 and \$10. Other hotels in the city, as also those in the vicinity of the Exposition grounds, will charge from \$2.00 to \$3.00 per day, according to location of rooms.

Respectfully, B. T. WALSH,
Chief Department.

Approved : E. A. BURKE,
Director General.

PEANUT FLOUR.

No doubt ere long "peanut flour" will be an important product of the South. Virginia is set down this year for 2,100,000 bushels, Tennessee for 250,000, and North Carolina at 135,000 bushels, these being the chief States engaged in the cultivation, and those in which it was first introduced from Africa. In Virginia they are called "peanuts" in North Carolina "ground-peas," in Tennessee "goobers," and Georgia, Alabama and Mississippi "pinders." Virginians are now beginning to turn the peanut into flour, and say it makes a peculiarly palatable "biscuit." In Georgia there is a custom, now growing old, of grinding or pounding the shelled peanuts and turning them into pastry, which has some resemblance, both in looks and taste, to that made of cocoanut, but the peanut pastry is more oily and richer, and we think, healthier and better every way. If, as some people believe, Africa sent a curse to America in slavery, she certainly conferred upon her a blessing in the universally popular peanut, which grows so well throughout the southern regions that we shall soon be able to cut off the now large importation altogether.—*Savannah (Ga.) Telegram.*

Editorial.

POST-NOTES ON THE STATE FAIR.

This Fair, we can say, as now informed, was a success. The receipts were not as large as the last year, but still enough to meet all obligations and to leave a surplus. It had unusual obstacles to contend with. The drouth which commenced in August was still prevailing, so that farmers were dispirited; and more than that, the important operation of wheat and oat seeding was delayed, and farmers felt it to their interest to remain at home and struggle to get these crops in the ground. Then, the wheat crop of the year, though a good one, was never lower in price, and all who were not compelled to sell to meet pressing obligations, were disposed to hold it for better prices, which left them short of money with which to indulge in any expenditure for pleasure or recreation. The presidential election, also, had its effect by calling away, for the time, attention from the current subjects of interest on the farm, and of matters pertaining thereto.

We are unable to give the space necessary for a report of all the premiums awarded at the Fair; nor is this necessary, as they have been already reported through the city papers at the time, but we propose to make some general notes on the several departments of the exhibition.

Before this, we may state that the Society met in general and annual session, in the Senate chamber, on the night of the 23d of October, and elected Robert Beverley, Esq., of Fauquier county, President; F. T. Glasgow, of Richmond city, Vice-President, and the following gentlemen as members of the Executive Committee, in place of the four who had served their constitutional term: Norman V. Randolph, Richmond city; R. E. Blankenship, ditto; R. V. Gains, Charlotte county; Hugh C. Preston, Montgomery county.

Col. A. S. Buford then presented and advocated in a very forcible manner a resolution calling on the Legislature of the State to make an adequate financial provision in aid of the Society and of the agriculture of the State; which resolution was adopted, with only one dissenting voice.

After the adjournment of the Society at a late hour of the night, Col. Beverley, chairman of the Farmers' Assembly which met at Charlottesville in August and adjourned to this date, took the chair, and an address was delivered by Mr. Shaw, American Consul at Manchester, England, on the subject of immigration to Virginia. A vote of

thanks was given to the honorable gentleman; and further than this, we have had no report of the proceedings of the Assembly.

All the departments of the Fair were well represented. In Department I. we note the following premiums:

Virginia slate, to J. R. Williamson & Co. *Collection of Virginia woods*, to Miller Manual Labor School.

In ART:—*Painting in oil*, to Mrs. W. H. Powers and Miss Annie Winston. *Mechanical drawing*, to Miller Manual Labor School. *Other drawings, &c.*, to Miss Belle Perkins, Miss Annie Winston, Miss I. C. Slaughter, Miss Marian Cook, and Mrs. Nellie W. Jones. *Painting on china*, to Mrs. L. L. Bass and Miss Fannie B. Young.

CLASS 2.—Best Continental shipping tobacco, to S. D. Morton. *Best English shipping tobacco*, to Elijah Chatterton. *Best sun-cured tobacco*, to J. C. Young.

CLASS 3.—Fruits, to Col. Norman Smith; George Chamen, represented by Mr. Hurt; J. B. Watkins, J. W. Porter, and H. C. Kendig. *Domestic wines*, to J. M. Blair and Christian & White, representing the wines of Albemarle county. *Floral products*, to John Laird and T. P. Hooper, professionals; and Mrs. E. T. Robertson and Mrs. M. E. Pilcher, amateurs. *Bees and honey*, to C. H. Lake and J. W. Porter. *Ladies' fancy work*: A very fine display, and premium recipients too numerous to mention.

DEPARTMENT II.—CLASS 1: In this class the rules require that all crops offered for premiums shall be accompanied by a statement of culture, soil, manuring, and yield. Messrs. G. B. Stacy and C. N. Stacy received the premium for the best acre of wheat; and the following is their statement, under the rules:

Contest for best acre of wheat. 1884. Grown by George B. Stacy and Cephas N. Stacy, at Retreat farm, Amelia county, Va., four miles from Amelia Courthouse.

Land was high and rolling, facing south; rocky red and brown soil with rock red clay subsoil. In clover, and grazed by hogs in 1882, but was not grazed very close. Plowed for tobacco in December, 1882; twenty good two-horse loads farm-pen manure applied during Spring of 1883. Failed to get tobacco plants for the whole lot; this portion was not planted, and crab-grass grew very luxuriantly. Cut it with a mower and raked it off in July, and plowed the land about five inches deep in August; it was not well plowed, as the land was too dry, and rocky land is hard to plow in dry weather. The Acme harrow was then run over this lot eight or nine times in order to keep the grass under, but it was still too foul to drill and had to be worked up with a seven-tooth harrow and drag and the loose grass and roots hauled off. On November 1st, one bushel of Ostery white wheat (which had

been dipped in bluestone water and dried with Charleston rock) was sown with a Pennsylvania drill, using 200 pounds per acre of a home-made mixture of remnants consisting of kainit, Powell's chemicals, Charleston rock, hen-house manure, dirt, and ashes. The seeding was regarded as imperfect, owing to the foul condition of the land. A log roller was run over the land both before and after seeding, and the land was left perfectly smooth, and was grazed very hard by sheep till March 1st, at which time hardly any wheat was visible. Timothy and weeds came up very thick and injured the stand, though in places the straw was five and a half feet high. The wheat was cut June 19th with a Buckeye Platform Twine Binder. The field was never gleaned, owing to scarcity of labor at harvest and to rains which set in soon after. Was put up in dozens and hauled to steam thresher and separator from the dozens. The yield was 2,590 pounds, or $43\frac{10}{100}$ bushels of good wheat cleaned for market. Unfortunately, six horses spent a night in the lot after the wheat was cut and injured the yield of the acre very materially. Had the land been gleaned and the horses not have gotten on it, the yield from the acre would have been nearly or quite fifty bushels. The heavy yield is attributed largely to the *variety of wheat—the Ostery*; and the attention of the committee is respectfully called to the sample. Two bushels of it are on exhibition for the best two bushels white wheat. Respectfully submitted.

G. B. STACY,
CEPHAS N. STACY.

AMELIA COURTHOUSE, October 20th, 1884.

At the request of C. N. Stacy, Esq., of this county, I have measured his prize acre which was in wheat this year, and find it contains 49.13 square yards.

Jos. B. DUNN.

Sworn to before me this 21st October, 1884. JERRY L. MANN, J. P.

Mr. Wm. Q. Lawrence was awarded the premium for the *best crop of hay*, with the following statement:

HENRICO COUNTY, VA., October 18th, 1884.

The farm on which the acre of hay offered for premium was made, is situated in Henrico county, about four miles north of Richmond, and the acre is in the middle of a twenty-acre field. The soil is a gray loam on a clay subsoil, well underdrained with draining-tile. In 1880 the land was plowed and manured with barnyard manure, at the rate of thirty cart-loads per acre. After being replowed, the land was planted in Irish potatoes, which yielded about three hundred bushels per acre. After harvesting the potato crop, the land was plowed and harrowed, and sowed by hand in orchard grass and clover seed at the following cost per acre:

To 1½ bushels orchard grass, at \$1.50,	-	-	-	\$2 25
½ gallon clover seed, -	-	-	-	50
1 two-horse team and driver, one day employed in plowing, harrowing, &c.,	-	-	-	2 50
Total cost,	-	-	-	\$5 25

In 1881, harvested a small crop of hay off the field. In 1882, and also in 1883, harvested a fair crop. In January, 1884, top-dressed the field with stable manure hauled from Richmond, at the rate of twenty-one horse-cart loads per acre, at a cost of 75c. per load, scattered on the field. May the 28th, cut the hay off the above acre with a "Champion Mower," and after curing it housed it at an estimated cost of two dollars.

SUMMARY.

Cost of seed per acre,	-	-	-	-	-	\$2	75
" seeding crop per acre,	-	-	-	-	-	2	00
" manure	"	-	-	-	-	15	00
" harvesting,	-	-	-	-	-	2	00
Total cost per acre,						\$21	75

The above is a correct account of the expenses, &c., of seeding and harvesting one acre of hay, offered for premium at the Virginia State Agricultural Fair.

Respectfully submitted,

W. M. Q. LAWRENCE.

HENRICO COUNTY, VA., May, 1884.

I hereby certify that I surveyed for Mr. W. Q. Lawrence one acre of land, in one piece, the same standing in orchard grass and clover hay.

T. CRAWFORD REDD, Surveyor.

HENRICO COUNTY, VA., June 6th, 1884.

We, the undersigned, do hereby certify that we weighed the hay on the above acre, and found it amounted to five thousand eight hundred and two (5,802) pounds.

JOHN B. LADD,
W. M. N. FORD,
HENRY CRENSHAW.

Mr. J. M. Lyneman was awarded the premium for the *best acre of mangel wurzel*, with the following statement:

A patch of land, one acre in one piece, I planted with mangel wurzel. The soil is of deep clay loam; the previous crop was late potatoes, well manured. Plowed said land very deep, harrowed very fine; then thrown up in lists three feet apart; then raked down, made drills in which sowed the seed three feet apart; when up thinned out to about eight inches apart in the row. Manured this patch of land with about forty tons of rotten cow and horse manure, broadcast, before plowing it; took about four pounds long red mangel wurzel seed at 50c. per pound; had the same weeded with hands once, then coaled the same between the rows three times during growth. The mangel wurzel had already matured about the middle of July, before the drought set in. Expenses of manure and labor for working the same, \$32.00. I have them hauled up about the first part of October, put up in stacks, covered over with brush until they go through sweat; then put them in long trenches four and a half feet wide by eighteen inches

deep, and cover over like turnip kilns, and they will keep all winter. They are excellent food for cows and hogs. There were sixty-five rows on said piece of land; in hauling up, three rows filled a wagon that held a ton, making $21\frac{1}{2}$ ton to the acre. (See sample).

Henrico county.

Respectfully, J. M. LYNEMAN.

CLASS 7.—Dr. John R. Woods, of Albemarle county, was given the first premium for a Virginia ham, and his process of curing, &c., is thus described:

I cut out my hogs when the animal heat is out, and to one thousand pounds I apply about one bushel and a peck of salt. I put on the flesh side of my hams between a tea and a tablespoonful of saltpetre, before applying salt; if large, I take them up and resalt where needed, doing this sooner or later, depending on the weather, whether mild or cold. I hang up my hams in four or five weeks, before which I apply as much fine-ground black pepper as can be made to adhere to the flesh; do not use any sugar or molasses. Light should be excluded from the house, especially during the fly season. Smoking should be done in damp weather, and a part of the time the wood should burn in a blaze to dry the meat somewhat, being particular in not having the fire too warm. If the meat in the fly season is given out after dark and before light in the morning, the pepper will be ample protection against the fly; but if the house is opened during the day, it may be necessary to use paper bags. No one can have first-class hams without having the right sort of hogs. The common black hog furnishes excellent hams, but the Berkshire, or Berkshire crossed with the black hog, makes as good as I ever saw.

JOHN R. WOODS.

Best two bushels white wheat, to A. L. Sturges, of Henrico county.

Best two bushels red wheat, to same.

Best display of several kinds of cereal grain in head, to same.

Best bag orchard-grass seed, to John Washington, Caroline county.

Best bushel of white corn, to T. Lovelock, of Orange county.

Best bushel of barley, to same.

Best bushel of yellow corn, to F. Guy, of Chesterfield county.

Best bale of Orchard grass, to W. Q. Lawrence, of Henrico county.

Best bale of fodder, to same.

Best bale of shucks, to same.

Best bale of oats, to same.

DEPARTMENT III.—This department may be summarized thus: There was the usual variety of farm machinery, mostly exhibited by our Richmond dealers—H. M. Smith & Co. and Ashton Starke.

The steam plowing was a great attraction—the Geiser Company and the Frick, both of Waynesboro, Pa., using friction engines and gang-plows, and both doing good work notwithstanding the drouth.

The Southside manufacturing Company of Petersburg exhibited a fine assortment of berry crates and baskets; also an improved egg crate. It is hoped this new enterprise will prove a success, as our sweet-gum and poplar are specially adapted for this work.

The model steam engine exhibited by the inventor, Mr. Anderson Cosby, a young Richmond mechanic, attracted much attention; and his improved cut-off and reverse was highly commended.

Messrs. J. W. Cardwell & Co., of Richmond, exhibited, among other machines, a hydraulic cotton press, in working order.

Messrs. Watt & Call and the Dixie Plow Company, of Richmond, exhibited a large assortment of their goods.

The Manvel wind-mill, exhibited by B. S. Williams & Co., of Kalamazoo, Mich., in working order on the ground, seemed to be nearly perfect, as it was arranged to shut off the mill when the tank was full, with a watering-trough that kept full of water without overflowing, and a pump that could be unshipped in a moment and used as a hand-pump, with a valve to draw water directly from the well instead of tank. This mill is advertised in our columns, and obtained the blue ribbon as it deserved.

DEPARTMENT V.—*Horses*: This department was pretty well represented, and the premiums were principally awarded to Messrs. T. W. Doswell, Hanover; Col. J. L. Carrington, Richmond city; Capt. F. A. Dangerfield, Harrisonburg, Va., for his celebrated horse Sam Purdy; S. W. Ficklin, Albemarle; J. Alfred Jones, Richmond, and J. J. Maxon, Ohio.

DEPARTMENT VI.—*Cattle*: Some very fine cattle were on exhibition, and the chief premiums went to the Blacksburg Agricultural College for *Shorthorns*; Dr. J. A. Reid, Orange county, ditto; J. Hoge Tyler, Wythe county, ditto; J. C. Trevelyan, Amelia county, ditto.

The principal exhibitors and recipients of premiums on *Devons* were Dillard & Graves, B. F. Graves, and T. Lovelock, of Orange county, and J. C. Trevelyan, of Amelia county.

Ayrshires were exhibited by S. A. Ellison, of Henrico, and received premiums.

Jerseys were largely represented by Messrs. A. P. & M. B. Rowe, and Rowe & Taylor, of Spottsylvania; Dr. J. G. Beattie, of Henrico, and took many premiums.

The *fat-stock* class was represented by Col. R. H. Dulany, of Loudoun; J. J. Maxon, of Ohio, and J. H. Lambert, of Richmond city.

DEPARTMENT VII.—*Sheep and swine*: In the class of long-wool sheep, H. A. S. Hamilton, of Augusta county, was the largest exhibitor and

recipient of premiums; and the next were Dr. J. A. Reid & Brother, of Orange county.

In *fine wools*, Col. S. S. Bradford, of Culpeper, as usual, carried off the majority of premiums, but was well accompanied by T. Lovelock, of Orange county.

In *middle wools*, H. A. S. Hamilton, of Augusta; R. H. Dulany, of Loudoun; Dr. John R. Woods, of Albemarle; Col. S. S. Bradford, of Culpeper, and A. Palmer Morehead, of Orange, were the chief exhibitors and winners of premiums.

Swine: T. Lovelock, J. J. Maxon, J. A. Reid & Brother, S. W. Ficklin, and H. A. S. Hamilton had fine specimens of hogs of different breeds, and all were awarded premiums.

DEPARTMENT VIII.—*Fowls and pigeons*: This department was more completely filled than any on the grounds. We cannot go into details, but will mention some of the principal exhibitors and owners of premium birds: J. J. Hollingsworth, Hanover county; W. S. Blackburn, Henrico county; M. B. Rowe, Spotsylvania county; W. S. Gooch, Henrico county; E. M. Pendleton, Louisa county; C. H. Lake, Maryland; T. B. Dorsey, A. T. Morris, J. P. Miller, T. Lovelock, Dr. Geo. B. Steel, C. H. McGruder, and E. H. Hutcherson.

The *plowing-match* was the last feature of the Fair, but it attracted but little attention, because of the unfavorable condition of the land by reason of the drouth.

MANAGEMENT OF MILK.

If we were asked what is the vital moment with milk, we would say, the hour after it comes from the cow. Milk, as it leaves the udder, is about 98 degrees Fahrenheit, and if poured in large cans, will retain a heat of over ninety for hours, if the weather is warm. Decomposition may be said to begin with milk the moment it leaves the udder, and there is nothing like heat to accomplish this. To avoid the danger, the only way is to cool the milk at once. Place the can in a trough or tub of fresh, cold water. If ice can be put in the water, all the better. If milk is to be kept over night to go to the factory in the morning, the above practice is imperative. The cool nights of the fall months are particularly misleading to dairymen. They think, because the nights are cool, there is no need for taking the trouble to cool the milk when first drawn from the cow. Mr. J. A. Smith, an old factory man, says this is a prolific cause of sour milk at the factory in the fall. No one should ever trust his own feelings as to the condition of the weather.

Always consult the thermometer, but even the coldest nights will not save the milk, if it is allowed to remain hot in the cans for any length of time. This does the damage; and, like Humpty Dumpty, after the mischief is done, all the king's men cannot set Humpty Dumpty up again.—*The Dairyman*.

The Southern Planter.

SUBSCRIPTION: \$1.25 a year in advance, or \$1.50 if not paid in advance.

TERMS OF ADVERTISING. PAGE RATES.

	1 Mon.	3 Mons.	6 Mons.	12 Mons.
One-eighth page	\$ 2 00	\$ 5 00	\$ 9 00	\$ 15 00
One-fourth page	3 50	9 00	16 00	27 00
One-half page...	7 00	15 00	30 00	50 00
One page.....	12 00	30 00	50 00	90 00

COLUMN RATES.

	1 Mon.	3 Mons.	6 Mons.	12 Mons.
One inch.....	\$ 1 00	\$ 2 50	\$ 4 50	\$ 8 00
Two inches.....	2 00	4 50	8 00	14 00
Three inches....	3 00	8 60	14 00	25 00
Half column....	3 50	8 50	15 00	27 00
One column.....	7 00	15 00	27 00	50 00

Special rates for cover.

Reading notices, 25 cents per line, of brevier type.

EDITORIAL NOTES

THE PRIZE ESSAY AND PRESIDENT BEVERLEY'S ADDRESS.

We invite especial attention to two leading articles in our present issue. The modest offer of a premium of \$25, to be awarded by a committee named by the State Agricultural Society, by Mr. Joseph M. Blair, of this city, has awakened much interest in the very important subject of "Self-supporting Employment for the Women of the South." More than seventy essays, covering more than 1200 pages of manuscript, came from nearly all the States of the Union. The report of the committee states the difficulty of discrimination, and we hope to publish a number of special merit which were not so fortunate as to receive the premium. No subject is of greater importance and interest to the females of the South, and we trust that all who read the *Planter* will not consider the publication of these essays a departure from its legitimate line of work.

The address of Robert Beverley, Esq.,

47

President of the National Agricultural Congress, is full of force, and will commend itself to the agricultural people of the whole country. It is time that agriculture, which the old Greek philosopher, Xenophon, styled the "nursing mother of arts," and of which Sully, of the Roman School, said "tillage and pasturage are the two breasts of the State," has had more recognition under the constitutions and enacted laws of the country. Let the farmers, under the lead of such men as Beverley, press the subject.

OUR SUBSCRIBERS

Will note the bills which accompany this issue. We dislike to press this subject, but when arrearages extend to 3, 6, 9, 12, 18, and 24 months they become an important question to us, whilst the small amount to each subscriber is a trifle. We say this in fact, as well as on a principle of justice. Subscribers who will not pay must be cut off, but their bills will be held against them. The *Planter* has enough *paying subscribers* to support it, but it does not wish to lose any, especially when the fact is recognized that the smallness of the sum and forgetfulness make causes for non-payment; but whatever these are, the Journal must be stopped to those who do not pay for it. Look out, therefore, for the January No., 1885, and if not received, the reason will be obvious.

MONITOR CORN-SHELLER.

This is a cheap and convenient sheller for *hand work*. Will shell from five to ten bushels per hour by the work of a boy. They are handy to all farmers for *mill-turns*. The manufacturers' price is \$5.00, but we will furnish them to subscribers *only* at this price, including one year's subscription to the *Planter*. When ordered they will be shipped directly from the factory.

COMMUNICATIONS.

We have an interesting article from Sir J. B. Lawes, Bart., Rothamsted, England, on the agricultural uses of *plaster*, but it is received too late for our present issue;

and we have other interesting articles which lie over for the same cause. It is necessary that communications to appear in any given month, must be in hand by the tenth of the preceding month.

APPLES.

We acknowledge the receipt of a basket of very large, beautiful, well-tasted apples from *Mrs. S. Corbin Wellford*, of Moss Neck, King George county, Va. They are Fall apples, and evidently a very superior kind, and we regret that the name was not sent with them. Virginia is the State for fruits of nearly all kinds if her people will properly cultivate them.

CLUBBING.

We will club with the *Monticello Farmer and Grape-Grower* at \$2.00 per annum for the two journals. Remittances may be made to us, or to Messrs. *Peck & Allen*, Charlottesville, Va.

We will also club with the *National Farm and Fireside*, Baltimore, Md., at \$1.50 per annum, and remittances may be made to us here, or to the *Fireside* in Baltimore.

WE return thanks to the President and Secretary of the Franklin Agricultural and Mechanical Society, Franklin, Va., for a complimentary ticket to their Fair, commencing 18th November, and regret that we were unable to attend, but will gladly publish any results of the Fair which may be sent to us.

BOOKS AND MAGAZINES.

HOW THE FARM PAYS. The Experiences of Forty Years of Successful Farming and Gardening. By the authors, **WILLIAM CROZIER** and **PETER HENDERSON**. New York: Peter Henderson & Co., Publishers, 35 and 37 Courtlandt street. 1884.

We have from the publishers this interesting and valuable book, which is neatly bound in embossed cloth, is handsomely illustrated, and contains 400 pages octavo. It is difficult to speak of it in detail as it deserves. It treats of the farm and garden in all the aspects of education, management, manures, crops, cultivation, imple-

ments and machinery, live-stock, fruits, &c. Every reading farmer should have a copy of it.

PROCEEDINGS OF THE FIRST ANNUAL SESSION OF THE SOUTHERN IMMIGRATION ASSOCIATION, held at Nashville, Tenn., March 11, 12 and 13, 1884. A. J. McWHERTER, President, Nashville, Tenn.; S. H. Nowlin, Secretary, Little Rock, Ark.

We are favored with this book of 352 pages, octavo, by Robert Beverley, Esq., of Virginia, one of the vice-presidents, and hope soon to make some valuable extracts from it. Among these is the address of Dr. M. G. Ellzey on Virginia, and that of the Hon. A. P. Butler, Commissioner of Agriculture of S. C., on the Phosphates of that State.

POULTRY FOR PROFIT. By P. H. JACOBS, Editor of *Poultry-Keeper*, &c., Chicago, Illinois.

This is an excellent little book, and a valuable manual on the farm and for the use of poultry fanciers.

ST. NICHOLAS for November is a rich No. of this interesting journal.

It is full of unique illustrations and reading matter, whilst its graver articles—such as "The First Convention of the Agassiz Association," "Ready for Business,"—furnish profitable reading.

The young people must look out for the year '85, when *St. Nicholas* promises them a series of stories conveying useful lessons, named as follows: "His Own Fault;" "Driven Back to Eden;" "Talks for Young Folk;" "Davy and the Gob-Goblin;" "Personally Conducted," &c. &c. Published by the Century Company, New York City, at \$3.00 per year.

We have the *North American Review* for December, current, which contains, among other valuable papers, "Labor and Capital before the Law," "Notes on Railway Management," &c. A. Thorndike Rice, Editor, 30 Lafayette Place, New York. Yearly subscription \$5.00.

HARPER'S MONTHLY for December (Christmas number) is unusually attractive. Its illustrations are very rich. The literary and artistic contents furnish a large and

interesting variety. To be had of the "News Agencies," or from the publishers, Harper & Brother, New York.

THE POPULAR SCIENCE MONTHLY for November is a very valuable number. "The Future of the Negro in the South;" "The Oil Supply of the World," and other articles, will be read with interest and profit. D. Appleton & Co., publishers, New York. \$5.00 per annum, or \$5.00 for same time, clubbed with the *Planter*.

THE ART AMATEUR is regularly received, and we have so frequently spoken of and commended it, especially to families which have a taste and fondness for art in the decoration of their homes, or for the occupation of leisure hours, that we know not what now to say, except to subscribe for it and keep it regularly on the centre-table of your sitting room.

HARPER'S WEEKLY, BAZAAR, and LITTLE PEOPLE are also regularly with us, and so interesting and valuable are they that we cannot add a word to what we have frequently said of them. Address Harper Brothers, New York.

REPORTS, &c.

FROM the Department of Agriculture, Washington, "An Investigation of the Composition of American Wheat and Corn," by Clifford Richardson, Assistant Chemist; also, "Report on Condition of Crops, Yield of Grain per Acre, and Freight-Rates of Transportation;" also, "Report of the Northern Sugar Industry and Record of its Progress during the Season of 1883."

GEORGIA CROP REPORT for September, J. T. Henderson, Commissioner.

TENNESSEE CROP REPORT for September, A. J. McWherter, Commissioner.

WE have the Catalogue of the "Spring-Hill Jersey Herd," which enumerates forty-four choice animals of different ages and sizes. Address M. B. Rowe, Fredericksburg, Va., or John Washington, Woodford P. O., Va.

W. H. MOORE, Agent for *Newspapers and Magazines*, Rockport, New York, sends us his Catalogue of Rates at which he will

furnish the leading papers of the country at less than publishers single rates by his system of wholesale rates. He has furnished us a number of subscribers, and we find his dealings all right.

WE have the Catalogue for 1884-'85 of John S. Collins, Morristown, N. J., who makes a specialty of *Small Fruits*; but he adds some desirable varieties of grapes, pears, &c. Mr. C's stock has heretofore been advertised in the *Planter*.

NEW ADVERTISEMENTS.

THE NEWARK MACHINE COMPANY, advertised in our columns, have removed their works from Newark, Ohio, to the large Gill Car-Works at Columbus, Ohio, which have been refitted with new machinery for the construction of the Victor Clover-Hullers, Grain-Drills, Hay-Rakes, Fanning-Mills, and Feed-Cutters.

MUSICAL (from the Boston *Evening Traveller*).—The *Knabe Piano*, which has such a wide popularity, is considered by many experts to be superior in every way to any other piano in the world. The success of this piano has only been attained by years of careful study, and the *Knabe*, with its excellent singing qualities, its great power, the elasticity of touch, and superior workmanship, is justly the favorite.

WE call the attention of our readers to the *Enterprise Meat-Choppers* advertised in our present issue. The demand for these Choppers has attained such immense proportions that the manufacturers, as we are informed, have been compelled to largely increase their facilities for making them, and we are assured that they are now being turned out at the rate of 2,500 per week, 150 hands being steadily employed on them. There can be no doubt as to the excellence of these Choppers. We have used choppers in our family for forty years, and none used in that time are comparable to this. We speak from an experience of a year, which fully satisfies us.

JOSEPH M. BLAIR, of this city, renews his advertisement in a very attractive form, and offers the choicest selection of family groceries, wines and liquors. We can from

experience recommend the family groceries of this house to our city friends; and also assure our country readers that they can buy from Mr. Blair the best of articles, at fair prices, and that their orders by mail will receive prompt attention.

DILLARD & GRAVES, well known breeders of thoroughbred stock, are worthy of patronage. Read their advertisement.

JOSEPH REALL, 32 Park Row, New York City, offers for sale thoroughbred Jersey Bulls.

ALEX. PEOPLES & Co., well known breeders of hogs, and constant advertisers in the *Planter*, have changed their firm-name to **W. W. Gibbons & Co.**, West Chester, Pa.

THE UNIVERSITY OF VIRGINIA renews its advertisement for one year. It is now the leading educational institution in the United States.

JOHN SAUL, Florist, Washington, D. C., is a leader in his business, and no one is more worthy of trust and confidence.

W. H. ROWLAND, Willcox Wharf, Charles City county, offers a valuable farm for sale. This is a good opportunity for an immigrant who wants a good Virginia farm.

Mrs. VAUGHAN offers for sale a desirable place in the suburbs of Petersburg, Va. We invite especial attention to it.

A. W. STEVENS & SON, Auburn, N. Y., manufacturers of first-class farm engines, threshers, French buhr-mills, power corn-shellers, &c.

MASON & HAMLIN ORGAN COMPANY, Boston, New York, and Chicago, are leading manufacturers in their line.

LIVINGSTON & Co., Pittsburgh, Pennsylvania, renew their advertisement of the Monitor Corn-Sheller. This is a handy sheller for "mill turns," and can be operated by a boy at the rate of five to ten bushels per hour. The price is \$5.00, and we have agreed to accept several of the shellers in payment for their advertisement. We will, therefore, furnish one of the shellers for \$5.00 and the *Planter* for one year; or, we will give one of them to any one who will send us ten subscriptions at our regular price of \$1.25.

ATTENTION is called to the ad. of **Dr. C. R. Cullen**, who advertises Alderney heifers and cows for sale or exchange (high-grade), and other improved stock.

THE DE LAVAL JERSEY HERD, Glen Ridge, N. J. (near Newark) offers registered Jersey bulls of the best breeding, of ages ranging from three months to three years, at prices within the reach of every farmer, and of strains of blood that will suit the most fastidious breeder. Those wishing bulls to head their herds or to improve their strains of blood, and farmers who wish to raise the value of native or other stock by a cross with the Jersey, will find this an excellent opportunity. Females of all ages are also offered.

CHRISTIAN & WHITE, of this city, are too well known to need commendation from us. With a large city trade they offer inducements to their country friends. They have recently refitted their store in an attractive and convenient manner. See their advertisement.

HOME INDUSTRY !

DIXIE SHIRTS !

"ACME" DRAWERS

FINE DRESS SHIRTS a specialty.

UNDERWEAR of all kinds ready made or to measure at short notice. Write for prices and printed blanks for self-measurement. We employ the most experienced cutters and skilled operators. We use the most improved steam machinery in our factory.

We guarantee the quality and fit of every garment that goes from our factory. Correspondence solicited.

H. T. MILLER & CO.,
MANUFACTURERS,

Cor. Ninth and Main Sts., Richmond, Va.
[Oct 1y]

ROBUST HEALTH

Is not always enjoyed by those who seem to possess it. The taint of corrupted blood may be secretly undermining the constitution. In time, the poison will certainly show its effects, and with all the more virulence the longer it has been allowed to permeate the system. Each pimple, sty, boil, skin disorder and sense of unnatural lassitude, or languor, is one of Nature's warnings of the consequences of neglect.

Ayer's Sarsaparilla

Is the only remedy that can be relied upon, in all cases, to eradicate the taint of hereditary disease and the special corruptions of the blood. It is the only alterative that is sufficiently powerful to thoroughly cleanse the system of **Serofulous** and **Mercurial** impurities and the pollution of **Contagious Diseases**. It also neutralizes the poisons left by **Diphtheria** and **Scarlet Fever**, and enables rapid recuperation from the enfeeblement and debility caused by these diseases.

Myriads of Cures

Achieved by **AYER'S SARSAPARILLA**, in the past forty years, are attested, and there is no blood disease, at all possible of cure, that will not yield to it. Whatever the ailments of this class, and wherever found, from the scurvy of the Arctic circle to the "veldt-sores" of South Africa, this remedy has afforded health to the sufferers by whom it was employed. Druggists everywhere can cite numerous cases, within their personal knowledge, of remarkable cures wrought by it, where all other treatment had been unavailing. People will do well to

Trust Nothing Else

than **AYER'S SARSAPARILLA**. Numerous crude mixtures are offered to the public as "blood purifiers," which only allure the patient with the pretense of many cheap doses, and with which it is folly to experiment while disease is steadily becoming more deep-seated and difficult of cure. Some of these mixtures do much lasting harm. Bear in mind that the only medicine that can radically purify the vitiated blood is

Ayer's Sarsaparilla,

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.

Sold by all druggists; price \$1,
six bottles for \$5.

A Safeguard.

The fatal rapidity with which slight Colds and Coughs frequently develop into the gravest maladies of the throat and lungs, is a consideration which should impel every prudent person to keep at hand, as a household remedy, a bottle of **AYER'S CHERRY PECTORAL**.

Nothing else gives such immediate relief and works so sure a cure in all afflictions of this class. That eminent physician, Prof. F. Sweetzer, of the Maine Medical School, Brunswick, Me., says:—

"Medical science has produced no other anodyne expectorant so good as **AYER'S CHERRY PECTORAL**. It is invaluable for diseases of the throat and lungs."

The same opinion is expressed by the well-known Dr. L. J. Addison, of Chicago, Ill., who says:—

"I have never found, in thirty-five years of continuous study and practice of medicine, any preparation of so great value as **AYER'S CHERRY PECTORAL**, for treatment of diseases of the throat and lungs. It not only breaks up colds and cures severe coughs, but is more effective than anything else in relieving even the most serious **bronchial** and **pulmonary** affections."

AYER'S Cherry Pectoral

Is not a new claimant for popular confidence, but a medicine which is to-day saving the lives of the third generation who have come into being since it was first offered to the public.

There is not a household in which this invaluable remedy has once been introduced, where its use has ever been abandoned, and there is not a person who has ever given it a proper trial for any throat or lung disease susceptible of cure, who has not been made well by it.

AYER'S CHERRY PECTORAL has, in numberless instances, cured obstinate cases of **chronic Bronchitis**, **Laryngitis**, and even acute **Pneumonia**, and has saved many patients in the earlier stages of **Pulmonary Consumption**. It is a medicine that only requires to be taken in small doses, is pleasant to the taste, and is needed in every house where there are children, as there is nothing so good as **AYER'S CHERRY PECTORAL** for treatment of **Croup** and **Whooping Cough**.

These are all plain facts, which can be verified by anybody, and should be remembered by everybody.

Ayer's Cherry Pectoral

PREPARED BY

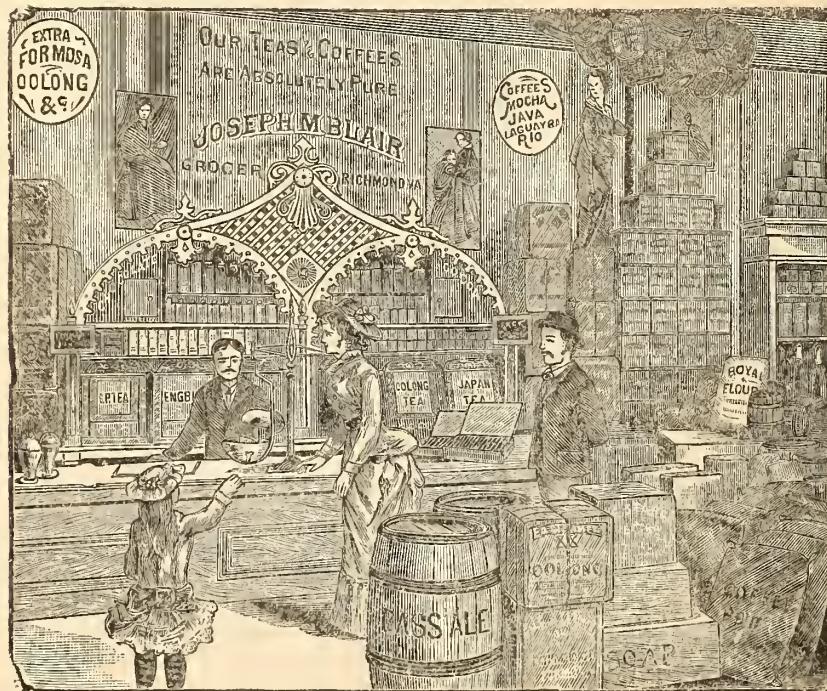
Dr. J. C. Ayer & Co., Lowell, Mass.

Sold by all druggists.

JOSEPH M. BLAIR,

—IMPORTER AND DEALER IN—

FANCY ————— GROCERIES



FINE TEAS AND WINES

803 Main Street (Pace Block),

RICHMOND, VIRGINIA.

SAMPLES AND PRICES FURNISHED UPON APPLICATION.

HIGGIN'S EUREKA ENGLISH HIGH GRADE DAIRY AND TABLE SALT

Has no equal for Purity, Strength, Flavor, Uniform Grain of Crystal, Keeping Quality, Perfect Dryness and Cheapness. Butter and Cheese salted with it carried the Highest Premiums over everything else, wherever put in competition. The Queen of England uses it. Hotels and Families should use no other. Salt is the cheapest article in the household. Why not use the best?

—FOR SALE BY—

CHRISTIAN & WHITE, Importers and Dealers in Fancy Groceries,
RICHMOND, VA.

[dec 1y]



Geared to run 350 Revolutions per Minute, / Grinds Corn, Oats, Barley and Rye at the Rate of 10 to 15 Bushels per Hour.

BUY IT BECAUSE IT IS THE BEST. Send for Circular.

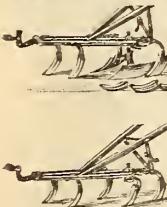
H. C. STAVER IMPLEMENT CO. 31 N. Canal St., CHICAGO, ILL.

Messrs. H. C. Staver Implement Co., Chicago, Ill.:

WICHITA, KAS., May 21, 1884.

Gentlemen,—Your favor of the 20th instant, asking a testimonial for Buckeye Feed Mills, in reply will say out of over 30 Buckeye Grinders sold by me, not one has failed to give satisfaction. They are the best Grinder I have ever sold, and I anticipate a very large trade in them the coming Fall and Spring. I don't believe as many as three grinders of all other makes have been sold in Wichita since I commenced selling the Buckeye.

J. A. WALLACE.



THE "PLANET JR" HOLLOW STEEL STANDARD HORSE HOE

As lately introduced, has no equal in the world. Its excellent work in the field has distanced that of all competitors. It is, in some sections, doing in one

passage, the work of four or five old-style implements, and in others super-

reeding the turners and other old-style implements.

THE "PLANET JR" HOLLOW STEEL STANDARD HORSE HOE

is the most perfect, easiest and strongest known. There are 5 distinct tools,

each with special merits, no two alike or the same price; all practical and

labor-saving. Let no Farmer or Gardener fail to study up during the

winter evenings our 1885 CATALOGUE, which gives reduced prices,

careful and exact engravings of these different machines, and such descrip-

tions as will enable the reader to judge correctly of their merits. Thirty

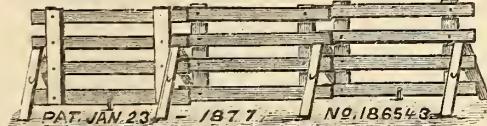
pages and forty engravings. Free to all. Correspondence solicited.

S. L. Allen & Co., Mfrs., 127 & 129 Catharine St., Phila., Pa.



[dec 4t]

PERMANENT PORTABLE FENCE.



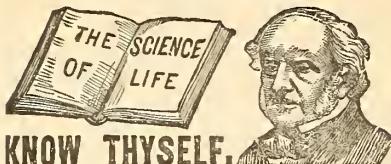
The Cleveland Patent, with Powell Improvement, the cheapest and best Fence.

The Cleveland Patent consists in supporting the panels by and between short stakes, driven into the earth, and standing in pairs, each pair being inclined towards each other at right angles; the heads of the stakes are bound together by wires, and the projecting ends of the lengthwise boards of the panels lap past each other, and rest on the binding wire between the stakes. A stake, driven in the centre of each panel, keeps the bottom firm; the opposite sides make the Fence strong and durable. The Fence is easily and cheaply constructed, and can be changed from one place to another with ease and dispatch. To form a passage-way, any panel may be removed, and thus a permanent Fence may be dispensed with. For information, and State, County or Farm rights, apply to

nov 1f

S. POWELL, Keysville, Charlotte Co., Va.

THE SCIENCE OF LIFE. ONLY \$1.
BY MAIL POSTPAID.



KNOW THYSELF.

A Great Medical Work on Manhood.

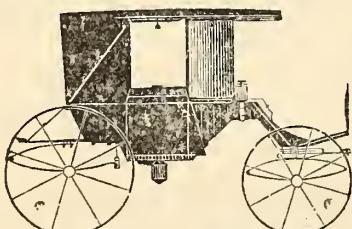
Exhausted Vitality, Nervous and Physical Debility, Premature Decline in Man, Errors of Youth, and the untold miseries resulting from indiscretion or excesses. A book for every man, young, middle-aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the Author, whose experience for twenty-three years is such as probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for \$2.50, or the money be refunded in every instance. Price only \$1 by mail, postpaid. Illustrative sample, 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.

This book should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet*.

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman—*Argonaut*.

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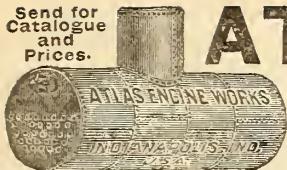


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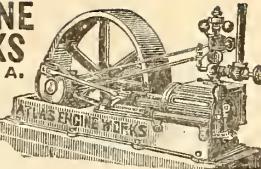
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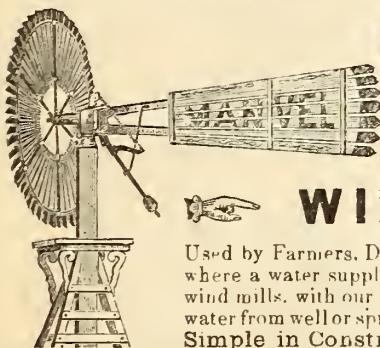
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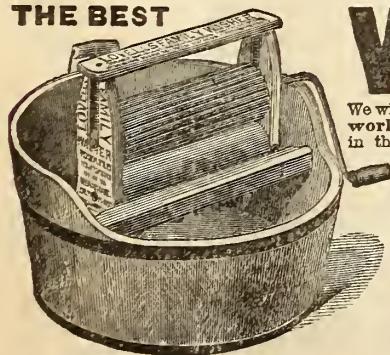
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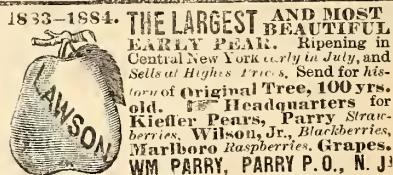
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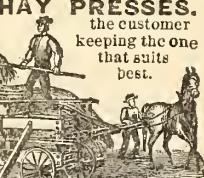
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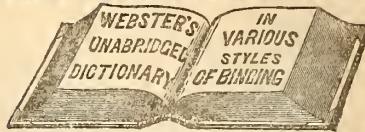
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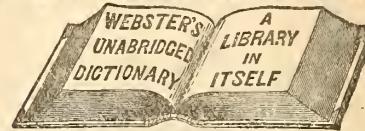
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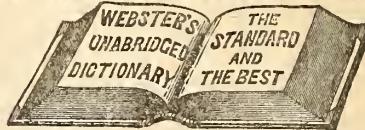
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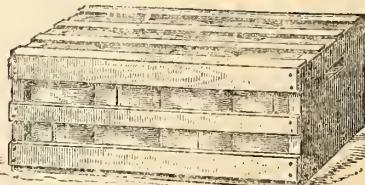


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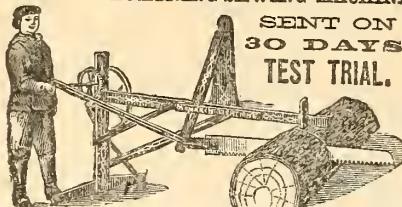


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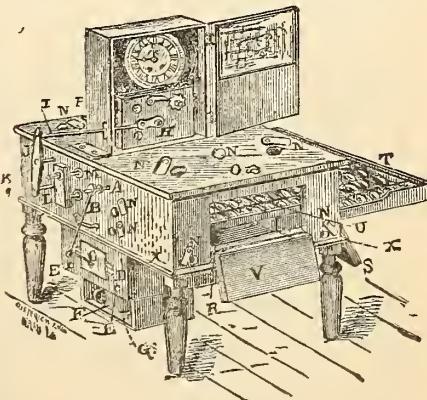
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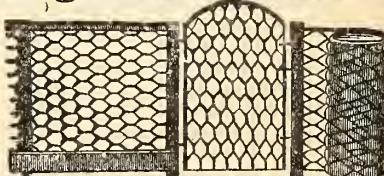
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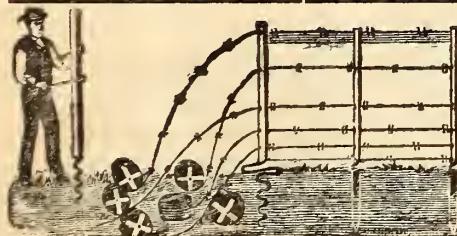
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